

McMANIMON & SCOTLAND

ATTORNEYS AT LAW

TRENTON, NEW JERSEY 08608-1104
172 WEST STATE STREET
(609) 278-1800
FAX (609) 278-9222

WASHINGTON, D.C. 20004-2404
1275 PENNSYLVANIA AVENUE, N.W.
SUITE 500
(202) 638-3100
FAX (202) 638-4222

ONE GATEWAY CENTER
NEWARK, NEW JERSEY 07102-5311
(201) 622-1800
FAX (201) 622-7333
FAX (201) 622-3744

ATLANTIC CITY, NEW JERSEY 08401-7324
26 SOUTH PENNSYLVANIA AVENUE
SUITE 200
(609) 347-0040
FAX (609) 347-0866

MORRISTOWN, NEW JERSEY 07960-6078
65 MADISON AVENUE
(MARAZITI, FALCON & GREGORY)
(201) 538-1221
FAX (201) 538-4150

June 13, 1994

VIA HAND DELIVERY

The Honorable Judson C. Hamlin
Middlesex County Superior Court
Middlesex County Courthouse
One Kennedy Square
New Brunswick, New Jersey 08903-0964

Re: City of Perth Amboy vs. Madison Industries, Inc., et al.
NJDEPE vs. Chemical Pollution Sciences, Inc., et al.
Docket Nos. C-4474-76 & L-281115-76 (Consolidated)

Dear Judge Hamlin:

On behalf of the City of Perth Amboy, I enclose two copies of the following documents with regard to the above-referenced matter:

1. Order to Show Cause;
2. Brief in Support of Order to Show Cause;
3. Affidavit of Fletcher Platt, P.E.;
4. Proposed form of Order;

The original of these documents has been filed with the Clerk and a copy served upon all parties on the attached service list.

I understand that you will be on vacation this week. I would respectfully request that the Order to Show Cause be considered for signature in your absence with a return date scheduled for after you return.

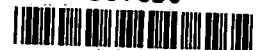
Respectfully Submitted,

Leah C. Healey
Leah C. Healey

LCH:mb

Enclosures

cc: Service List (By Federal Express or Regular Mail)



McMANIMON & SCOTLAND

ATTORNEYS AT LAW

TRENTON, NEW JERSEY 08608-1104
172 WEST STATE STREET
(609) 278-1800
FAX (609) 278-9222

WASHINGTON, D.C. 20004-2404
1275 PENNSYLVANIA AVENUE, N.W.
SUITE 500
(202) 638-3100
FAX (202) 638-4222

ONE GATEWAY CENTER
NEWARK, NEW JERSEY 07102-5311
(201) 622-1800
FAX (201) 622-7333
FAX (201) 622-3744

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26 SOUTH PENNSYLVANIA AVENUE
SUITE 200
(609) 347-0040
FAX (609) 347-0866

MORRISTOWN, NEW JERSEY 07960-6078
65 MADISON AVENUE
(MARAZITI, FALCON & GREGORY)
(201) 538-1221
FAX (201) 538-4150

June 13, 1994

VIA HAND DELIVERY

Clerk of the Court
Middlesex County Superior Court
Middlesex County Courthouse
One Kennedy Square
New Brunswick, New Jersey 08903-09604

Re: City of Perth Amboy vs. Madison Industries, Inc., et al.
NJDEPE vs. Chemical Pollution Sciences, Inc., et al.
Docket Nos. C-4474-76 & L-281115-76 (Consolidated)

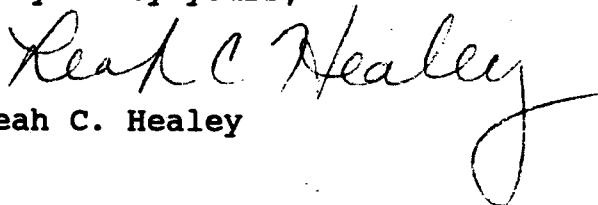
Dear Sir/Madam:

As special environmental counsel to the City of Perth Amboy, I enclose an original and two copies of the following documents with regard to the above-referenced matter for filing:

1. Order to Show Cause;
2. Brief in Support of Order to Show Cause;
3. Affidavit of Fletcher Platt, P.E.;
4. Proposed Form of Order

Please stamp one copy of each document "filed" and return a copy to me in the enclosed envelope. Upon filing, please also transmit one copy of the above to the Clerk of the Superior Court.

Very truly yours,


Leah C. Healey

LCH:mb

Enclosures

cc: Honorable C. Judson Hamlin (By Hand)
Service List (By Federal Express Overnight or Regular Mail)

Service List

PERTH AMBOY

Hon. Joseph Vas
Mayor
City of Perth Amboy
260 High Street
Perth Amboy, New Jersey 08861
Regular Mail

Charles Licata, Esq.
State of New Jersey
Office of Environmental Prosecutor
25 Market St., CN 118
Trenton, New Jersey 08625
Federal Express

John S. Frisco, Deputy Director
Emergency & Remedial Response Div
USEPA
26 Federal Plaza
New York, New York 10278
Regular Mail

Patricia Hicks, Esq.
Asst. Regional Counsel
USEPA Region II
26 Federal Plaza, Rm 309
New York, New York 10278
Regular Mail

Dennis Gonzalez, Esq.
Corporation Counsel
Perth Amboy City Hall
260 High Street
Perth Amboy, New Jersey 08861
Federal Express

Fletcher Platt, P.E. & V.P.
Killam Associates
6 Emery Ave.
Randolph, New Jersey 07869-1362
Regular Mail

Larry Pollex
Business Administrator
City of Perth Amboy
Perth Amboy City Hall
260 High Street
Perth Amboy, NJ 08861
Regular Mail

William J. Bigham, Esq.
Sterns & Weinroth
50 W. State Street, Suite 1400
P.O. Box 1298
Trenton, NJ 08607
Federal Express

Steven T. Singer, Esq.
Schwartz, Tobia & Stanziale
22 Crestmont Road
Kip's Castle
Montclair, New Jersey 07042
Federal Express

----- X
CITY PERTH AMBOY, :
A Municipal Corporation :
of the State of New Jersey, :
Plaintiff, :
vs. :
MADISON INDUSTRIES, INC., :
et al. :
Defendants. :
----- X
STATE OF NEW JERSEY, DEPART- :
MENT OF ENVIRONMENTAL PRO- :
TECTION. :
Plaintiff, :
vs. :
CHEMICAL & POLLUTION SCIENCES :
INC., et al. :
Defendants. :
----- X

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY

DOCKET Nos. C-4474-76 and
L-281115-76 (consolidated)

SPECIAL ENVIRONMENTAL CASE

CIVIL ACTION

ORDER TO SHOW CAUSE
Returnable June 1994

McMANIMON & SCOTLAND
One Gateway Center, Suite 1800
Newark, New Jersey 07102
(201) 622-1800
Attorney for Appellant,
The City of Perth Amboy

This matter being opened to the Court by McManimon & Scotland, (Joseph J. Maraziti, Jr., appearing) on behalf of the Plaintiff, CITY OF PERTH AMBOY, ("City") and it appearing to the Court that final Orders dated April 27, 1988 and July 2, 1992, were entered, which Orders directed, inter alia, that the Defendant, MADISON INDUSTRIES, INC., ("Madison"), store zinc, lead and cadmium in a manner which prevents those contaminants from entering the waters of the State and from being placed in an area where it might flow or drain into the said waters; and it further appearing from the Plaintiff, City of Perth Amboy's Brief and Affidavit of Fletcher N. Platt, Jr., P.E., Executive Vice President (Killam Associates), that the Defendant, Madison, has failed to remove or properly store material containing such hazardous materials despite the requests of the City; and the Court being of the opinion that the City might be entitled to receive supplemental relief because of the failure of the said Defendant to comply with the aforesaid Orders dated, April 27, 1988, and July 2, 1992.

It is on this _____ day of _____, 1994.

ORDERED that the Defendant, Madison show cause before this Court, at the Court House, 1 Kennedy Square, New Brunswick, New Jersey, on the _____ day of _____, 1994 at _____ o'clock, or as soon thereafter as counsel may be heard, why the Plaintiff should not receive supplemental relief by reason of Defendant's failure to comply with the aforesaid Order, such supplemental relief consisting of an Order Enforcing Litigant's Rights pursuant to R. 1:10-5, providing for the removal or proper storage of materials

containing hazardous materials and other relief, as more fully set forth as follows:

1. Within 20 days of the date of this Order, Defendant Madison shall remove any and all piles containing hazardous materials or, in the alternate, store said materials in a manner protective of the waters of the State, the water supply of the City of Perth Amboy and the environment.

2. The Defendant, Madison shall pay to the City of Perth Amboy all reasonable and necessary counsel fees, expert fees, and costs incurred by the City in connection with this action.

3. Nothing in this Order shall prevent the federal, state or local government including the City of Perth Amboy from taking any and all enforcement or other actions against the Defendant, Madison as may be available pursuant to law. Nor shall this Order act in any way to prevent the City of Perth Amboy from seeking monetary damages or other relief from the Defendant Madison pursuant to Paragraph 10 of the 1992 Order or other applicable law.

4. Such other relief as the Court may deem necessary and proper.

IT IS FURTHER ORDERED that a copy of this Order to Show Cause and of the supporting Brief and Affidavit of Fletcher N. Platt, Jr., P.E., filed herewith, be served upon MADISON INDUSTRIES, INC., by certified mail, return receipt requested, within ____ days from the date hereof.

C. Judson Hamlin, J.S.C.

CERTIFICATION OF SERVICE

I, Maria M. Baute, hereby certify that on June 20, 1994, I served the within Order to Show Cause, Affidavit of Fletcher Platt, P.E., supporting brief, and proposed form of Order on the parties on the attached service list by Federal Express and regular mail.

Maria M. Baute
Maria M. Baute

Dated: June 20, 1994

----- X
CITY PERTH AMBOY, :
A Municipal Corporation :
of the State of New Jersey, :
 :
Plaintiff, :
 :
vs. :
 :
MADISON INDUSTRIES, INC., :
et al. :
 :
Defendants. :
 :
----- X

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY

DOCKET NOS. C-4474-76 and
L-281115-76 (consolidated)

SPECIAL ENVIRONMENTAL CASE

----- X
STATE OF NEW JERSEY, DEPART- :
MENT OF ENVIRONMENTAL PRO- :
TECTION. :
 :
Plaintiff, :
vs. :
 :
CHEMICAL & POLLUTION SCIENCES :
INC., et al. :
 :
Defendants. :
 :
----- X

Civil Action

BRIEF OF PLAINTIFF CITY OF PERTH AMBOY
IN SUPPORT OF ORDER TO SHOW CAUSE

McMANIMON & SCOTLAND
One Gateway Center, Suite 1800
Newark, New Jersey 07102
(201) 622-1800
Attorneys for Appellant,
The City of Perth Amboy

Of Counsel:
Joseph J. Maraziti, Jr.

On the Brief:
Leah C. Healey, Esq.

TABLE OF CONTENTS

PROCEDURAL HISTORY AND STATEMENT OF FACTS 1

LEGAL ARGUMENT

THE COURT SHOULD PROVIDE THE CITY OF
PERTH AMBOY WITH SUCH RELIEF AS
REQUESTED IN ITS FORM OR ORDER
BECAUSE THE DEFENDANT MADISON HAS
FAILED TO COMPLY WITH COURT ORDERS
REQUIRING REMOVAL OR PROPER STORAGE
OF PILES CONTAINING HAZARDOUS
MATERIALS 3

CONCLUSION 8

APPENDIX Separately
Bound

PROCEDURAL HISTORY AND STATEMENT OF FACTS

In 1981, the trial court entered a final order and judgment finding Madison Industries, Inc. (Madison) liable for the discharge of contaminants into the Runyon Watershed (1981 Order). Amongst the relief entered was the requirement that Madison remove or provide enclosed storage of piles of material containing lead cadmium and zinc.

After an appeal of this judgment by all parties for varying reasons, the Appellate Division affirmed the decision. Thereafter in June 1983, the trial court entered a final order and judgment conforming with the Appellate decision, including the requirement that Madison remove or provide enclosed storage of the piles (1983 Order).

On or about April 1985, the City of Perth Amboy ("City") filed a motion to enforce litigants rights seeking Madison's compliance with the 1983 Order.

Subsequently in 1988, by Order amending the 1983 judgment, the court acknowledged that the piles referred to in the 1983 Order had been removed but imposed, by order amending judgment, an ongoing obligation that Madison store the piles of material containing zinc, lead, or cadmium in a manner to prevent those contaminants from entering the waters of the State or being placed in an area which might impact the waters of the State (1988 Order).

In July 1992, the trial court by Order modified the requirements in the 1988 Order but affirmed the obligation of Madison to store the material containing lead, zinc and cadmium in a manner to prevent an effect on the waters of the State (1992 Order).

In March 1993, the New Jersey Department of Environmental Protection and Energy ("Department") filed an order to show cause in a separate action seeking sampling, removal and or storage of the piles in accordance with New Jersey regulations. This action was preceded by numerous inspections of Madison and the issuance of notices of violation to Madison by the Department. To date, the piles remain on the site.

LEGAL ARGUMENT

THE COURT SHOULD PROVIDE THE CITY OF PERTH AMBOY WITH SUCH RELIEF AS REQUESTED IN ITS FORM OF ORDER BECAUSE THE DEFENDANT MADISON HAS FAILED TO COMPLY WITH COURT ORDERS REQUIRING THE REMOVAL OR PROPER STORAGE OF PILES CONTAINING HAZARDOUS MATERIALS

By Order to Show Cause, made pursuant to R. 4:52-2, the City seeks enforcement of litigant's rights, pursuant to R. 1:10-5, as provided by the decisions of the trial court, in the Chancery and Law Divisions and the Appellate Division rendered over more than ten years in this case. In particular, the City seeks removal of piles containing hazardous materials which have been stored on the

Madison site in a manner which prior Orders of this Court, as affirmed most recently by this Court's 1992 Order.

Pursuant to R. 1:10-5, the Court should enter an order requiring effective protection of the watershed from releases of hazardous substances associated with the open storage of contaminated piles. The City is entitled to this relief under prior court orders with which Madison has failed to comply. New Jersey Department of Health v. Roselle, 34 N.J. 331 (1961). Roselle recognizes the private right of action in the form of a motion to enforce litigants rights by stating, "if a litigant is denied what is due him under the order, he has suffered injury from which he is entitled to supplemental relief" Id. at 337, 338.

As far back as 1981, the trial Court found that Madison was storing contaminated materials on its site in an unprotected manner which was polluting Perth Amboy's water supply with heavy metals, particularly zinc. The Court ordered Madison to remove a 10,000 ton mountain of zinc ash, which was located directly over the aquifer and leaching zinc into the groundwater which serves as the City's water supply. The 1981 Order allowed Madison only 90 days to "completely remove the piles of exposed zinc lead and cadmium presently stored on site in an unprotected manner on its industrial premises or provide, in a manner approved by the Department for the enclosure of these materials within a shed or other structure." (Pa 9) Madison failed to comply with the Order.

In 1983, again the trial court found the existence of the piles to be an endangerment and repeated its mandate that Madison remove or provide enclosed storage of the piles within 90 days.

(Pa 19) Although the language of both Orders contemplated a role for the Department in approving the method of removal and enclosure, the Orders did not give Madison discretion as to the length of time for removal or proper storage - ninety (90) days was the deadline for both the 1981 and 1983 Orders. Madison's response was to ignore the 90 day requirement and to continue to increase the size of the piles as part of its ongoing operations. Noteworthy is the language in the 1983 Order retaining the court's jurisdiction of the matter to allow the parties to apply to the court for enforcement of the Order's terms. (Pa 20) Madison did not seek an extension of the 90 day Order nor did the Department seek the court's assistance in enforcing the Order.

After more than two years, the City was forced to file a motion to enforce litigants rights in 1985 seeking Madison's compliance with the prior orders. The City's papers included an affidavit of Daniel Pejakovich, the Runyon Watershed Superintendent, which revealed that the twenty foot pile which was to have been removed since 1981 had simply been moved to a different location on the property.

Although the 1988 Order indicated the piles were finally removed, the Order also imposed a continuing obligation upon Madison requiring that, "[t]he storage of zinc, lead and cadmium at

the Madison site shall be done in a manner which prevents zinc, lead and cadmium from entering the waters of the State and further prevents zinc, lead and cadmium from being placed in an area where it might flow or drain into said waters". (Pa 27)

Madison's failure to comply with all aspects of the 1988 Order, forced the City to return to Court in 1991 under an Order to Show Cause to enforce litigants rights. After a trial, the Court ordered remediation. The 1992 Order specifically provided that it does not supersede the requirement in the 1988 Order with respect to the proper and protective storage of the piles. (Pa 61)

In direct contravention of these Orders, Madison continues to maintain piles containing hazardous materials containing lead and cadmium. The Department's sampling results of these piles show the presence of cadmium and lead at levels which cause the material to fail the Toxic Characteristic Leaching Procedure test which indicates the tendency of these hazardous materials to leach. See Affidavit of Platt, p. 3. Because the piles are exposed to the elements, the material is not prevented from leaching hazardous substances to the groundwater of the Runyon Watershed. Platt, at 9, 10. Uncovered piles exposed to wind, rain and snow cause the material to blow, flow or drain into Pricketts Brook and bypass the recovery system. Platt at 7, 8. Sampling by the City and Madison down gradient of the piles indicates it is probable that the hazardous materials are leaching to groundwater, flowing to

surface water and dispersing to the environment in violation of all prior Orders. Platt at 7, 8, 9, 10.

Although the 1992 Order affirmed the requirement for Madison to properly store the material, Madison has failed to do so despite the Department's issuance of notices of violation. The City is aware that in March, 1993, the Department filed an order to show cause in a separate action seeking testing and removal of the piles pursuant to the Solid Waste Management Act and Resource Conservation and Recovery Act. The Department's litigation is focused on whether Madison is complying with regulations with respect to the storage of the material. The City's action, however, seeks enforcement of prior court Orders so as to protect the watershed from any continuing or potential release of hazardous substances. Regardless of the regulatory scheme under which Madison believes it should operate, Madison is prohibited under prior Orders from maintaining exposed piles of hazardous substances which may impact the waters of the State.

Over fifteen months have passed since the Department filed its action yet the piles, which prior courts have ordered removed within 90 days, remain uncovered. The City has continually expressed concern about the potential discharge of hazardous substances from the piles, and considers the prevention of the continuing discharge from the Madison site as important as the cleanup of the already released pollution. In light of the above, the City sees no alternative but to seek relief by this motion.

Madison's defiance of the court orders regarding the piles forced the City to file a motion to enforce litigants rights once before in 1985. Not unexpectedly, the piles have re-appeared and Madison continues to create new piles of contaminated material at its facility in a manner which endangers the potable water supply of the City and the environment. History repeats itself at the expense of the residents of the City of Perth Amboy who are again forced to file an action to enforce litigants rights seeking removal of piles contaminated with hazardous substances.

CONCLUSION

For the foregoing reasons, the City of Perth Amboy respectfully requests that the Orders of the trial court and Appellate Division be effectively enforced to require Madison to immediately remove or store the piles of hazardous materials in a manner which is protective of the watershed.

McMANIMON & SCOTLAND
Attorney for Appellant,
City of Perth Amboy

By: Leah C. Healey
Leah C. Healey

Dated: June 17, 1994

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CITY PERTH AMBOY, :
A Municipal Corporation :
of the State of New Jersey, :
 :
Plaintiff, :
 :
vs. :
 :
MADISON INDUSTRIES, INC., :
et al. :
 :
Defendants. :
 :
----- X

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY

DOCKET NOs. C-4474-76 and
L-281115-76 (consolidated)

SPECIAL ENVIRONMENTAL CASE

----- X
STATE OF NEW JERSEY, DEPART- :
MENT OF ENVIRONMENTAL PRO- :
TECTION. :
 :
Plaintiff, :
 :
vs. :
 :
CHEMICAL & POLLUTION SCIENCES :
INC., et al. :
 :
Defendants. :
 :
----- X

APPENDIX TO PLAINTIFF CITY OF PERTH AMBOY'S
BRIEF IN SUPPORT OF ORDER TO SHOW CAUSE

McMANIMON & SCOTLAND
One Gateway Center, Suite 1800
Newark, New Jersey 07102
(201) 622-1800
Attorneys for Appellant,
The City of Perth Amboy

Of Counsel:
Joseph J. Maraziti, Jr.

On the Brief:
Leah C. Healey, Esq.

APPENDIX

FINAL ORDER AND JUDGMENT, SUPERIOR COURT, LAW DIVISION, DATED
OCTOBER 16, 1981 Pa 1

FINAL ORDER AND JUDGMENT AMENDED TO CONFORM WITH THE DECISION OF
APPELLATE DIVISION, SUPERIOR COURT, LAW DIVISION, DATED JUNE 14,
1983 Pa 12

ORDER AMENDING JUDGMENT OF JUNE 14, 1983 CONSENTED TO BY ARNET
REALTY, SUPERIOR COURT, LAW DIVISION, DATED APRIL 27, 1988 . Pa 21

ORDER MODIFYING APRIL 27, 1988 ORDER AMENDING JUDGMENT OF JUNE 14,
1983 CONSENTED TO BY ARNET REALTY, SUPERIOR COURT, LAW DIVISION,
DATED JULY 2, 1992 Pa 40

FILED

OCT 16 1981

DAVID D. FURMAN, J.S.C.

LOWENSTEIN, SANDLER, BROCHIN,
 KOHL, FISHER & MOYLAN
 A Professional Corporation
 65 Livingston Avenue
 Roseland, New Jersey 07068
 Attorneys for Defendant
 CPS Chemical Co., Inc.

SUPERIOR COURT OF NEW JERSEY
 LAW DIVISION, MIDDLESEX COUNTY
 DOCKET NO. C-4474-76
 L-28115-76

CITY OF PERTH AMBOY, A Municipal
 Corporation,

Plaintiff :

(CONSOLIDATED)

v. :

Civil Action

MADISON INDUSTRIES, INC.,
 et al.,

FINAL ORDER AND JUDGMENT

Defendant, :

STATE OF NEW JERSEY, DEPART-
 MENT OF ENVIRONMENTAL PROTEC-
 TION,

Plaintiff :

v. :

CHEMICAL & POLLUTION SCIENCES,
 INC., et al.,

Defendant :

This action was brought on for trial before the Court
 sitting without a jury, David D. Furman, J.S.C., presiding, com-

LOWENSTEIN, SANDLER,
 BROCHIN, KOHL,
 FISHER & MOYLAN
 ATTORNEYS AT LAW
 65 LIVINGSTON AVENUE
 ROSELAND N. J. 07068

mencing on June 2, 1978, May 29, 1979, and June 15, 1981, by plaintiffs, State of New Jersey, Department of Environmental Protection ("Department") by James R. Zazzali, Attorney General of New Jersey, Deputy Attorneys General Steven R. Gray and Rebecca Fields, appearing, and the City of Perth Amboy ("Perth Amboy") by Albert Seaman, Esq. and George Boyd, Esq., on the claims set forth in the Department's Amended Verified Complaint filed on November 3, 1978, and Perth Amboy's Complaint filed March 16, 1977, in the presence of defendants, CPS Chemical Co., by Lowenstein, Sandler Brochin, Kohl, Fisher & Boylan, A Professional Corporation, (Murry Brochin, Esq. and Michael L. Rodburg, Esq. appearing), and Madison Industries, Inc., by Lynch, Mannion, Martin, Benitz & Lynch (John A. Lynch, Jr., Esq. appearing), and the Court having considered the evidence and the arguments of the attorneys for the respective parties; and the Court having decided that judgment should be entered in favor of the plaintiffs, Department and Perth Amboy, and against the defendants, CPS and Madison, on the issue of defendants' liability for the pollution of surface and groundwaters and soils in the Prickett's Brook Watershed in the vicinity of defendants' industrial premises in violation of State statutes N.J.S.A. 58:10A-1 et seq. and N.J.S.A. 58:10-23.11 et seq.; and the Court having considered the Department's request for specific remedial relief directing the defendants to pay for the containment and removal of the contaminants from the surface and groundwaters and soils in Prickett's Brook Watershed as well as the claim by

LOWENSTEIN, SANDLER,
BROCHIN, KOHL,
FISHER & BOYLAN
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 NEW YORK AVENUE
JERSEY CITY, N.J. 07310

Perth Amboy for monetary damages; and the State having moved on July 31, 1981, for supplemental relief; therefore

IT IS on this 16 day of *October*, 1981,

ORDERED that judgment be and hereby is entered in favor of the plaintiffs, Department and Perth Amboy, and against CPS and Madison, based upon the findings of fact and conclusions of law set forth in the oral opinion of July 8, 1981, and in the written opinion of the Court as dated July 31, 1981, as follows:

1. There is awarded to the Department a sum not to exceed \$1,820,500 to be used by the Department for the purposes outlined below in this paragraph and to be apportioned between the defendants as outlined in this paragraph:

(a) There shall be constructed and installed a slurry cutoff wall of bentonite tied into a continuous natural clay layer in the location described in the court's expert's report (Exhibit PS-1, Appendix E, Page E-12) as modified by the Department in Exhibit PS-9, (copies of which are annexed hereto.)

(b) The cost for the installation and operation of the slurry wall shall be apportioned between the defendants as follows:

(i) The cost of the construction and installation of the slurry wall is to be borne by the industrial defendants CPS and Madison in proportion to the area enclosed by the slurry cutoff wall within their respective industrial sites (i.e. Block 6303, Lots 10 and 11 respectively as designated on the tax map of

VENTURA, SANDLEN,
GROCHER, SON,
POWER & BOYLAN
ATTORNEYS AT LAW
1 LYNNBETH AVENUE
DEGLAND, N.J. 07068

Old Bridge Township) according to a fraction, the numerator of which is the area of the enclosed premises of CPS or Madison, as the case may be, plus one half of the enclosed land area located within the slurry wall and outside both industrial premises, and the denominator of which is the total land area enclosed within the slurry wall.

2. There is awarded to the Department a sum not to exceed \$1,700,000 to be used by the Department for the purposes outlined below in this paragraph and to be apportioned between the defendants as outlined below:

(a) There shall be installed within the area contained in the slurry wall maintenance wells not to exceed four in number;

(b) There shall be installed outside of the area contained by said slurry wall decontamination wells not to exceed four in number (see generally, Exhibit PS-1, Appendix E, Page E-13 to 16);

(c) There shall be pumping from the above referenced maintenance and decontamination wells at a rate of approximately one million gallons per day for a period of approximately four years which water will be discharged to the Old Bridge Township Sewage Authority's ("OBTSA") sewer line and then into the Middlesex County Utility Authority's ("MCUA") sewage treatment plant without pretreatment with the exception of such sludge dewatering and heavy metal removal as may be required by the MCUA or by the Department for discharges in the normal course to the MCUA system (see generally, Exhibit PS-1, Appendix E, Page E-13 to 16);

(d) Should pretreatment for the removal of metal contaminants from the water

RESTER, SANDLER,
BROCKMAN, FOML,
FISHER & GUYLAN
ATTORNEYS AT LAW
127 WEST 40TH AVENUE
NEW YORK, N.Y. 10018

pumped as described in paragraph "c" above, be required, there shall be constructed and installed a plant for the treatment and removal of heavy metals (Exhibit PS-1, Appendix E, Page E-18). This treatment plant shall be operated for a period of approximately four years (Exhibit PS-1, Appendix E, Page E-19);

(e) There shall be constructed and installed a "force main" or pipeline to convey pumped waters to the MCUA system (Exhibit PS-1, Appendix E, Page E-20). This force main or pipeline shall be operated for a period of approximately four years (Appendix B, estimate SW700-2);

(f) There shall be constructed and installed monitoring wells to monitor the progress and efficacy of decontamination; these wells may be sampled and the samples analyzed.

(g) The cost for the remedial measures outlined in this paragraph "2", not to exceed \$1,700,000, shall be divided equally between the industrial defendants, CPS and Madison, except that the cost of any heavy metal removal and sludge dewatering as may be required by the MCUA or by the Department (i.e. the cost of constructing and operating a plant for the removal of heavy metals) shall be borne solely and exclusively by Madison.

3. There is awarded to the Department a sum of \$583,000 to be used by the Department for the purposes outlined below:

(a) Prickett's Brook shall be rerouted to the south of the industrial sites of CPS and Madison (Block 6303, Lots 10 and 11 respectively) in accordance with the location depicted in Figure 44 in Exhibit PS-1 or in such a manner that it completely bypasses the industrial activities on the sites of CPS and Madison;

(b) The rerouting shall be accomplished in accordance with specifications to be

WYSTER, SANDLER,
BROCKMAN, HENKEL
FISHER & BOYLAN
INCORPORATED
ATTORNEYS AT LAW
1111 LIVINGSTON AVENUE
NEW YORK, N.Y. 10022

developed by the Department or by a contractor selected by the State in accordance with any applicable State bidding laws;

(c) The cost of rerouting Frickett's Brook shall be borne equally by the defendants.

4. The implementation of the remedial measures outlined in paragraphs "1", "2", and "3" of this Order shall be accomplished in accordance with specifications to be developed by the Department or by a contractor selected by the Department in accordance with any applicable State bidding laws. The specifications shall be submitted to the defendants and Perth Amboy before becoming final and shall be subject to approval by the Court.

5. All of the sums which the defendants are required to pay hereunder except that required by paragraph 8 shall be paid in installments in the nature of progress payments within 20 days after presentation of (a) an invoice from the contractor who is doing the work for which the payment is required and (b) a certificate from the State that the particular work for which payment is to be made has been completed to its satisfaction. The award of \$100,000 to Perth Amboy set forth in paragraph 8 shall be enforceable at the time and in the manner applicable to a judgment at law.

6. There is awarded to Perth Amboy and against Madison a sum of \$585,000 to be used by Perth Amboy for the purposes outlined below in this paragraph:

(a) Three hundred and thirty thousand dollars (\$330,000) of the award to

WYNSTON, SANDLER,
BROOKMAN, KORN,
PETER & SUTLAN
ATTORNEYS AT LAW
NEW YORK, NEW YORK
100-200-1111

Perth Amboy under this paragraph shall be used for the purpose of mechanically and hydraulically dredging the sediments of Prickett's Pond and a portion of Prickett's Brook (Exhibit PS-1, Appendix E, Page E-1 and 2);

(b) Two hundred and fifty-five thousand dollars (\$255,000) of the award to Perth Amboy under this paragraph shall be used for the purpose of disposing of the dredged sediments from Prickett's Pond and Prickett's Brook on the site of Perth Amboy's Prickett's Brook watershed property in a manner approved by and acceptable to the Department. This figure shall include the cost of lining and covering the sediments in a manner acceptable to the Department. This figure shall also include engineering and professional fees incurred in connection with the onsite disposal operation, but shall not include attorney's fees;

7. There is awarded to Perth Amboy and against CPS a sum not to exceed \$430,000 which sum of money shall be used by Perth Amboy for the purposes outlined below in this paragraph:

(a) The award of the sum of four hundred and thirty thousand dollars shall be used for the purpose of pumping pond water out of Prickett's Pond and disposing of the pumped waters into the MCUA system.

This figure shall include engineering and other professional fees associated with the pumping and disposal, but shall not include attorney's fees;

(b) The pumping of pond water out of Prickett's Pond shall be accomplished by the same contractor, engineer, or consultant retained by Perth Amboy for the purpose of dredging the sediments from Prickett's Pond as more fully described in paragraph "6" above;

WENSTEIN, SANDLER,
BROCKMAN, KORN,
FISHER & BOTLAN
ATTORNEYS AT LAW
1 LUMBERSON AVENUE
DEGLAND, N. J. 07068

(c) The pumping of pond water from Prickett's Pond shall be coordinated with and conducted in a manner consistent with all other remedial measures ordered in paragraphs "1", "2", "3", and "6" in this Order; in addition, the order of proceeding with respect to the remedial measures herein directed shall be in the discretion of the Department.

8. There is awarded to Perth Amboy and against Madison and CPS damages in the amount of \$100,000 for the loss of four years of the beneficial use of Perth Amboy's property located within the affected area of Prickett's Brook watershed;

(a) The award shall include any and all taxes due and payable by Perth Amboy on the affected property;

(b) CPS and Madison shall be jointly and severally liable for the award under this paragraph with the right of contribution to each.

9. Perth Amboy's other claims for punitive damages and for other money damages are denied; provided however that the award of damages to Perth Amboy presumes that the measures ordered by this Court for restoration of Prickett's Brook watershed within four years' will succeed and is without prejudice to any future claim for damages if these measures fail or if, before four years time, the water needs of Perth Amboy exceed the capacity of the presently operating wells in the Tennants Pond area.

10. The award of monies to the plaintiffs as listed in paragraphs "1", "2", "3", "6", and "7" of this Order include an amount representing 10% inflation for the period between the date of the Dames & Moore Report (October 1980) and the date of the trial (June, 1981).

WESTON BARNES,
COUNSEL, NEW
JERSEY & NEW YORK
STATE & FEDERAL
COURTS
1000 AVENUE
NEW YORK, N.Y. 10020

11. Within ⁹⁰ days of the execution of this Order, Madison must completely remove the piles of exposed zinc, lead, and cadmium presently stored in an unprotected manner on its industrial premises or provide, in a manner approved by the Department for the enclosure and covering of these materials within a shed or other structure.

12. The motion of the Department on July 31, 1981, to modify in accordance with paragraphs "1", "6", and "7" of its motion the findings and conclusions of the Court concerning liability and the apportionment of monies allocated for the implementation of the ordered remedial measures is denied.

13. The Department's motion on July 31, 1981, to impose joint and several liability on the defendants for the cost of implementing the remedial measure set forth in this Order is denied; the defendants shall each be liable only for the obligations, and for no more than the amounts, expressly imposed upon it by this Order and Judgment.

14. The plaintiffs shall be granted access to the industrial sites of the defendants on reasonable notice, at reasonable times, and in a reasonable manner for the purpose of implementing the remedial measures described above and for supervising the implementation of these measures and the plaintiffs and their agents and contractors, subject to the same requirements of reasonableness, shall be permitted to sample and extract waters from all monitoring wells located on the industrial sites of the defendants

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11. Within 30 days of the execution of this Order, Madison must completely remove the piles of exposed zinc, lead, and cadmium presently stored in an unprotected manner on its industrial premises or provide, in a manner approved by the Department for the enclosure and covering of these materials within a shed or other structure.

12. The motion of the Department on July 31, 1981, to modify in accordance with paragraphs "1", "6", and "7" of its motion the findings and conclusions of the Court concerning liability and the apportionment of monies allocated for the implementation of the ordered remedial measures is denied.

13. The Department's motion on July 31, 1981, to impose joint and several liability on the defendants for the cost of implementing the remedial measure set forth in this Order is denied; the defendants shall each be liable only for the obligations, and for no more than the amounts, expressly imposed upon it by this Order and Judgment.

14. The plaintiffs shall be granted access to the industrial sites of the defendants on reasonable notice, at reasonable times, and in a reasonable manner for the purpose of implementing the remedial measures described above and for supervising the implementation of these measures and the plaintiffs and their agents and contractors, subject to the same requirements of reasonableness, shall be permitted to sample and extract waters from all monitoring wells located on the industrial sites of the defendants

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including those wells installed by the Department and by the defendants.

15. A reasonable fee for services heretofore rendered by Dames & Moore as the court expert, to the extent that it has not already been paid by the defendants, may be included in court costs and taxed to the defendants in the usual manner, with notice to the defendants and an opportunity to contest the reasonableness of the fee.

16. Jurisdiction of this matter is hereby retained by the Court and any party may apply upon due notice in connection with the enforcement thereof.

DOF 17. Defendants CPS and Madison and Plaintiffs Perth Amboy having advised the Court that each of them intends to appeal from this Final Order and Judgment, and a stay of the judgment pending appeal having been requested, the application for such a stay pending appeal is hereby

David D. Purman, J.S.C.
David D. Purman, J.S.C.

VENETIAN SANDLER
PROCTOR, KENNY
100 N. BOSTON
PL. AL CORPORATION
11 HOLLERS AT LAW
JUNIOR AVENUE
BOSTON, MA 02110

IRWIN I. KIMMELMAN
Attorney General of New Jersey
Attorney for Plaintiff, New
Jersey Department of
Environmental Protection
Richard J. Hughes Justice Complex
CN112
Trenton, New Jersey 08625

BY: STEVEN R. GRAY
Deputy Attorney General
(609) 292-1501

CITY OF PERTH AMBOY, A Municipal
Corporation,

Plaintiff,

v.

MADISON INDUSTRIES, INC.,
et al.,

Defendant,

STATE OF NEW JERSEY, DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Plaintiff,

v.

CHEMICAL & POLLUTION SCIENCES, INC.,
et al.,

Defendant.

SUPERIOR COURT OF NEW JERSEY

MIDDLESEX COUNTY

DOCKET NO. C-4474-76

L-28115-76

(Consolidated)

J-3744-81

Civil Action

FINAL ORDER AND JUDGMENT AMENDED
TO CONFORM WITH THE DECISION OF
APPELLATE DIVISION

This action was brought on for trial before the court
sitting without a jury, David D. Furman, J.S.C., presiding, commenc-

State of New Jersey, Department of Environmental Protection ("Department") by James R. Zazzali, Attorney General of New Jersey, Deputy Attorneys General Steven R. Gray and Rebecca Fields, appearing, and the City of Perth Amboy ("Perth Amboy") by Albert Seaman, Esq. and George Boyd, Esq., on the claims set forth in the Department's Amended Verified Complaint filed on November 3, 1978, and Perth Amboy's Complaint filed March 16, 1977, in the presence of defendants, CPS Chemical Co., by Lowenstein, Sandler, Brochin, Kohl, Fisher & Boylan, A Professional Corporation, (Murry Brochin, Esq. and Michael L. Rodburg, Esq. appearing), and Madison Industries, Inc., by Lunch, Mannion, Martin, Benitz & Lynch (John A. Lynch, Jr., Esq. appearing), and the Court having considered the evidence and the arguments of the attorneys for the respective parties; and the Court having decided that judgment should be entered in favor of the plaintiffs, Department and Perth Amboy, and against the defendants, CPS and Madison, on the issue of defendants' liability for the pollution of surface and groundwaters and soils in the Prickett's Brook Watershed in the vicinity of defendants' industrial premises in violation of State statutes N.J.S.A. 58:10A-1 et seq. and N.J.S.A. 58:10-23.11 et seq.; and the Court having considered the Department's request for specific remedial relief directing the defendants to pay for the containment and removal of the contaminants from the surface and groundwaters and soils in Prickett's Brook Watershed as well as the claim by Perth Amboy for monetary damages; and the Appellate Division having affirmed in part and modified in part the October 16, 1981 judgment of the trial court; therefore,

IT IS on this ^{14th} day of ^{June} ~~May~~, 1983,

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ORDERED that judgment be and hereby is entered in favor of the plaintiffs, Department and Perth Amboy, and against CPS and Madison, based upon the findings of fact and conclusions of law set forth in the oral opinion of July 8, 1981, in the written opinion of the Court as dated July 31, 1981, and in the written opinion of the Appellate Division as dated April 21, 1983, as follows:

1. There is awarded to the Department a sum of \$1,820,500 to be used by the Department for the purposes outlined below in this paragraph and to be apportioned between the defendants as outlined in this paragraph:

(a) There shall be constructed and installed a slurry cutoff wall of bentonite tied into a continuous natural clay layer in the location described in the court's expert's report (Exhibit PS-1, Appendix E, Page E-12) as modified by the Department in Exhibit PS-9, (copies of which are annexed hereto).

(b) The cost for the installation and operation of the slurry wall shall be apportioned between the defendants as follows:

(i) The cost of the construction and installation of the slurry wall is to be borne by the industrial defendants CPS and Madison in proportion to the area enclosed by the slurry cutoff wall within their respective industrial sites (i.e., Block 6303, Lots 10 and 11 respectively as designated on the tax map of Old Bridge Township) according to a fraction, the numerator of which is the area of the enclosed premises of CPS or Madison, as the case may be, plus one half of the enclosed land area located within the slurry wall and outside both industrial premises, and the denominator of which is the total land area enclosed within the slurry wall.

2. There is awarded to the Department a sum of \$1,700,000 to be used by the Department for the purposes outlined below in this

paragraph and to be apportioned between the defendants as outlined below:

(a) There shall be installed within the area contained in the slurry wall maintenance wells not to exceed four in number;

(b) There shall be installed outside of the area contained by said slurry wall decontamination wells not to exceed four in number (see generally, Exhibit PS-1, Appendix E, Page E-13 to 16);

(c) There shall be pumping from the above referenced maintenance and decontamination wells at a rate of approximately one million gallons per day for a period of approximately four years which water will be discharged to the Old Bridge Township Sewage Authority's ("OBTSA") sewer line and then into the Middlesex County Utility Authority's ("MCUA") sewage treatment plant without pretreatment with the exception of such sludge dewatering and heavy metal removal as may be required by the MCUA or by the Department for discharges in the normal course to the MCUA system (see generally, Exhibit PS-1, Appendix E, Page E-13 to 16);

(d) Should pretreatment for the removal of metal contaminants from the water pumped as described in paragraph "c" above, be required, there shall be constructed and installed a plant for the treatment and removal of heavy metals (Exhibit PS-1, Appendix E, Page E-18). This treatment plant shall be operated for a period of approximately four years (Exhibit PS-1, Appendix E, Page E-19);

(e) There shall be constructed and installed a "force main" or pipeline to convey pumped waters to the MCUA system (Exhibit PS-1, Appendix E, Page E-20). This force main or pipeline shall be operated for a period of approximately four years (Appendix B, estimate SW700-2);

(f) There shall be constructed and installed monitoring wells to monitor the progress and efficacy of decontamination; these wells may be sampled and the samples analyzed;

(g) The cost for the remedial measures outlined in this paragraph "2," \$1,700,000, shall be divided equally between the industrial defendants, CPS and Madison, except that the cost of any heavy metal removal and sludge dewatering as may be required by the MCUA or by the Department (i.e., the cost of constructing and operating a plant for the removal of heavy metals) shall be borne by Madison.

3. There is awarded to the Department a sum of \$583,000 to be used by the Department for the purposes outlined below:

(a) Prickett's Brook shall be rerouted to the south of the industrial sites of CPS and Madison (Block 6303, Lots 10 and 11 respectively) in accordance with the location depicted in Figure 44 in Exhibit PS-1 or in such a manner that it completely bypasses the industrial activities on the sites of CPS and Madison;

(b) The rerouting shall be accomplished in accordance with specifications to be developed by the Department or by a contractor selected by the State in accordance with any applicable State bidding laws;

(c) The cost of rerouting Prickett's Brook shall be borne equally by the defendants.

4. The implementation of the remedial measures outlined in paragraphs "1," "2," and "3" of this Order shall be accomplished in accordance with specifications to be developed by the Department or by a contractor selected by the Department in accordance with any applicable State bidding laws. The specifications shall be submitted to the defendants and Perth Amboy before becoming final and shall be subject to approval by the Court. Any issue as to the reasonableness or necessity of any specifications or costs to be incurred may be submitted to the Court.

5. All of the sums which the defendants are required to pay hereunder except that required by paragraph "8" shall be paid in

installments in the nature of progress payments within 20 days after presentation of (a) an invoice from the contractor who is doing the work for which the payment is required and (b) a certificate from the State that the particular work for which payment is to be made has been completed to its satisfaction. The award of \$100,000 to Perth Amboy set forth in paragraph "8" shall be enforceable at the time and in the manner applicable to a judgment at law.

6. There is awarded to Perth Amboy and against Madison a sum of \$585,000 to be used by Perth Amboy for the purposes outlined below in this paragraph:

(a) Three hundred and thirty thousand dollars (\$330,000) of the award to Perth Amboy under this paragraph shall be used for the purpose of mechanically and hydraulically dredging the sediments of Prickett's Brook (Exhibit PS-1, Appendix E, Page E-1 and 2);

(b) Two hundred and fifty-five thousand dollars (\$255,000) of the award to Perth Amboy under this paragraph shall be used for the purpose of disposing of the dredged sediments from Prickett's Pond and Prickett's Brook on the site of Perth Amboy's Prickett's Brook watershed property in a manner approved by and acceptable to the Department. This figure shall include the cost of lining and covering the sediments in a manner acceptable to the Department. This figure shall also include engineering and professional fees incurred in connection with the onsite disposal operation, but shall not include attorney's fees.

7. There is awarded to Perth Amboy and against CPS a sum of \$430,000 which sum of money shall be used by Perth Amboy for the purposes outlined below in this paragraph:

(a) The award of the sum of four hundred and thirty thousand dollars shall be used for the purpose of pumping pond water out

of Prickett's Pond and disposing of the pumped waters into the MCUA system.

This figure shall include engineering and other professional fees associated with the pumping and disposal, but shall not include attorney's fees;

(b) The pumping of pond water out of Prickett's Pond shall be accomplished by the same contractor, engineer, or consultant retained by Perth Amboy for the purpose of dredging the sediments from Prickett's Pond as more fully described in paragraph "6" above;

(c) The pumping of pond water from Prickett's Pond shall be coordinated with and conducted in a manner consistent with all other remedial measures ordered in paragraphs "1," "2," "3," and "6" in this Order; in addition, the order of proceeding with respect to the remedial measures herein directed shall be in the discretion of the Department.

8. There is awarded to Perth Amboy and against Madison and CPS damages in the amount of \$100,000 for the loss of four years of the beneficial use of Perth Amboy's property located within the affected area of Prickett's Brook watershed;

(a) The award shall include any and all taxes due and payable by Perth Amboy on the affected property;

(b) CPS and Madison shall be jointly and severally liable for the award under this paragraph with the right of contribution to each.

9. Perth Amboy's other claims for punitive damages and for other money damages are denied; provided however that the award of damages to Perth Amboy presumes that the measures ordered by this Court for restoration of Prickett's Brook watershed within four years will succeed and is without prejudice to any future claim for damages

if these measures fail or if, before four years time, the water needs of Perth Amboy exceed the capacity of the presently operating wells in the Tennants Pond area.

10. The award of monies to the plaintiffs as listed in paragraphs "1," "2," "3," "6," and "7" of this Order include an ~~amount~~ representing 10% inflation for the period between the date of the Dames & Moore Report (October 1980) and the date of the trial (June, 1981).

11. Within 90 days of the execution of this Order, Madison must completely remove the piles of exposed zinc, lead and cadmium presently stored in an unprotected manner on its industrial premises or provide, in a manner approved by the Department for the enclosure and covering of these materials within a shed or other structure.

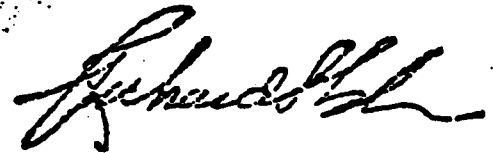
12. The Court's determination to deny paragraphs "1," "6," and "7" of the Department's July 31, 1981 motion is modified to the extent required by the Appellate Division's determination of joint and several liability and of modified limits in the dollar amounts of the defendants' liability. Notwithstanding the limits on the amounts set forth in paragraphs "1," "2," "3," "6," and "7" hereof, the defendants are hereby obligated to pay all cleanup and removal costs actually incurred by the Department, in accordance with paragraphs "4" and "5" hereof, in implementing the remedies ordered by paragraphs "1," "2," "3," "6," and "7" hereof, such costs to be allocated as between the defendants as set forth therein.

13. The defendants shall be jointly and severally liable for all costs of implementing all remedial measures set forth in this Order.

14. The plaintiffs shall be granted access to the industrial sites of the defendants on reasonable notice, at reasonable times, and in a reasonable manner for the purpose of implementing the remedial measures described above and for supervising the implementation of these measures and the plaintiffs and their agents and contractors, subject to the same requirements of reasonableness, shall be permitted to sample and extract waters from all monitoring wells located on the industrial sites of the defendants including those wells installed by the Department and by the defendants.

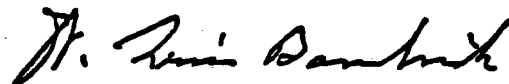
15. A reasonable fee for services heretofore rendered by Dames & Moore as the court expert, to the extent that it has not already been paid by the defendants, may be included in court costs and taxed to the defendants in the usual manner, with notice to the defendants and an opportunity to contest the reasonableness of the fee.

16. Jurisdiction of this matter is hereby retained by the Court and any party may apply upon due notice in connection with the enforcement thereof.



RICHARD S. COHEN, J.S.C.

I hereby certify that the foregoing
is a true copy of the original on file
in my office.



Clerk

ORIGINAL FILED WITH CLERK OF SUPERIOR COURT

W. CARY EDWARDS
Attorney General of New Jersey
Attorney for Plaintiff, New Jersey
Department of Environmental Protection
Richard J. Hughes Justice Complex
CN 112
Trenton, New Jersey 08625

By: Ronald P. Feksch,
Deputy Attorney General
(609) 292-1557

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MIDDLESEX COUNTY
DOCKET NO. C-4474-76
3-28115-76
(Consolidated)

CITY OF PERTH AMBOY, a municipal Corporation,)

Plaintiff,)

v.)

MADISON INDUSTRIES, INC.,)
et al.,)

Defendants.)

Civil Action

ORDER AMENDING JUDGMENT
OF JUNE 14, 1983

CONSENTED TO BY ARNET REALTY

STATE OF NEW JERSEY, DEPARTMENT OF ENVIRONMENTAL PROTECTION,)

Plaintiff,)

v.)

CHEMICAL & POLLUTION SCIENCES, INC., et al.,)

Defendant.)

This action was brought on for trial before the Court sitting without a jury, David D. Furman, J.S.C., presiding, commencing on June 2, 1978, May 29, 1979 and June 15, 1981, by plaintiffs, State of New Jersey, Department of Environmental Protection ("NJDEP") by the Attorney General of the State of New Jersey, Deputy Attorneys General Steven R. Gray and Rebecca Fields appearing at the trial, and by the City of Perth Amboy by Albert Seaman, Esq. and George Boyd, Esq., and in the presence of defendants, CPS Chemical Co. ("CPS") by its then counsel, Lowenstein, Sandler, Brochin, Kohl, Fisher & Boylan and in the presence of defendant Madison Industries, Inc. ("Madison"), by its then counsel, Lynch, Mannion, Martin, Benitz, & Lynch; and the Court at that trial entered Judgement in favor of the plaintiffs and against the defendants, all as more particularly described in the Court's Final Judgment of October 10, 1981, and all parties appealed that Judgment to the Superior Court of New Jersey, Appellate Division, and the Appellate Division rendered its written decision on April 21, 1983, affirming in part and modifying in part the Trial Court's Judgment and remanding the matter to the Trial Court for the entry of an appropriate Amended Judgment; and such Amended Judgment, entitled "Final Order and Judgment amended to conform with the decision of the Appellate Division" was entered on June 14, 1983 by the Honorable Richard S. Cohen; and the defendants thereafter unsuccessfully sought certification to the New Jersey Supreme Court.

Thereafter, the defendants CPS (Schwartz, Tobia & Stanziale, by Theodore A. Schwartz, Esq.), and Madison (Sterns, Herbert, Weinroth and Petrino, P.A., by William J. Bigham, Esq.),

at their own expense retained consultant and undertook the development of an alternative ground water recovery program which could more effectively address the ground water concerns which were the subject of the June 14, 1983 Judgment mentioned above, and which program would be implemented by the defendants at the CPS/Madison site; and NJDEP considered carefully that alternative recovery program and agreed that it could more effectively abate such contamination; and NJDEP and the defendants thereafter engaged in lengthy and protracted settlement negotiations in an effort to reach agreement on various particulars to that alternative remedial program; and said parties having agreed to utilize the alternative remedial program, and further, agreeing that it is mutually beneficial to have the defendants implement the alternative remedial program and assume responsibility for same instead of NJDEP, as provided in previous Orders of this Court, and NJDEP having made a motion to amend the Judgment of June 14, 1983 to implement the alternative remedial program set forth hereafter, which motion was opposed by City of Perth Amboy, and the matter being the subject of an evidentiary hearing on January 26, 1988 and January 27, 1988 before the Honorable John E. Keefe and the court having rendered an oral decision from the bench on January 27, 1988 finding that the remedial measures mandated by the June 14, 1983 Judgment were environmentally unsound and thereby granting NJDEP's motion to amend the Judgment of June 14, 1983.

IT IS on this *27th* day of *April*, 1988;

ORDERED as follows:

1. CPS and Madison shall install and operate a ground water recovery system as conceptually proposed in Wehran Engineer-

ing's Addendum Number Two to the "Recommended Remedial Program for Abatement of Ground Water Contamination of the Old Bridge Sand Aquifer in the Vicinity of CPS and Madison Industries" dated March 28, 1984, attached hereto as Appendix A. This proposed plan includes a crescent-shaped slurry wall keyed into the South Amboy Fire Clay approximately one-third of the distance into Prickett's Pond (Based on borings, the parties estimate that the depth of the South Amboy Fire Clay is 30' to 70') and three (3) recovery wells to control and capture the contaminated ground water plume.

2 CPS and Madison shall relocate Prickett's Brook to the south of the CPS and Madison facilities as conceptually proposed in Converse Consultants Report "Recommended Site Recovery Program, Madison Industries, Incorporated," dated May 27, 1983, attached hereto as Appendix B.

3. CPS and Madison shall discharge the pumped ground water to the Middlesex County Utilities Authority ("MCUA") treatment plant in Sayreville through the Old Bridge Township Sewerage Authority ("OBTSA") collection system. CPS and Madison shall pay all applicable connection and user charges assessed by the OBTSA and/or the MCUA associated with the discharge. A direct discharge of any or all of the wastewaters to the MCUA will be allowable provided appropriate permits and approvals are obtained from the MCUA and the NJDEP.

4. (a) CPS and Madison shall discharge the aforesaid pumped ground water in accordance with all applicable discharge requirements of the MCUA and the OBTSA.

(b) All the ground water pumped from the recovery well designated T-1 and process waste waters of Madison shall be

pretreated by Madison for zinc. A pretreatment program which will achieve 80% removal of zinc from the waste streams detailed above shall be implemented in accordance with Appendix D-1. Removal shall be calculated as $\frac{I-E}{I}$ where, I = influent concentration, and E = effluent concentrations. If Madison should cease to operate its facilities it can, as an alternative to the 80% removal pretreatment program described here, pretreat to five parts per million at D-1 only. Nothing in this paragraph shall be deemed to relieve Madison of any legal obligations it may have with respect to compliance with the Inorganic Chemical Manufacturing Point Source Category, zinc chloride subcategory, 40 CFR. 415.674. CPS shall not have any responsibility whatsoever for the treatment or processing of any process wastewaters of Madison, and further, this Order shall not be construed, interpreted, or impose any liability whatsoever, including but not limited to joint and several liability, on CPS for any handling, discharging and/or processing (including any pretreatment) of Madison's process wastewaters.

(c) Any plans and specifications for the construction of the discharge system and/or pretreatment system which are required by applicable rules of the MCUA to be reviewed and approved by said agency shall be submitted to the MCUA and OBTSa prior to any construction.

(d) As part of the discharge system as aforesaid, a secured metering and sampling vault shall be provided at locations to be established and approved by the MCUA and OBTSa. The MCUA, OBTSa and NJDEP shall retain control and access to the metering and sampling stations at all times.

5. (a) The ground water discharge as described above shall be monitored in accordance with applicable rules and regulations of the MCUA. A sampling protocol shall be established through the NJPDES/SIU Permit Program regarding the monitoring of the discharge.

(b) Should significant deviations occur between sampling data obtained by the MCUA and CPS and Madison, further testing may be required by the MCUA and/or NJDEP. In the event that disagreement arises between the MCUA and CPS and Madison regarding the need for further testing, same shall be resolved by NJDEP. Said further testing shall be conducted at the expense of CPS and Madison at an independent laboratory approved by NJDEP.

(c) It is recognized by the parties hereto that the MCUA, due to restrictions that may be placed upon its effluent discharge or sludge disposal activities, may require revisions to its system-wide pretreatment program to further define discharge limitations. In such event, the parties recognize that revised processing or treatment may be required of all indirect users of the MCUA system.

(d) This Order shall not abridge or affect any rights that CPS and/or Madison may have in regard to said revisions.

6. (a) The crescent-shaped slurry wall referenced in paragraph 1 is intended to act as a barrier to the downstream migration of the contaminated sediments in the east end of Prickett's Pond and to act as a barrier to induced recharge from the down gradient side of the recovery wells.

(b) Contaminated sediments and/or pond water in Frickett's Pond do not require extraction or removal at this time, but CPS and Madison may, after the ground water recovery system is operational and within a reasonable time thereafter, reevaluate, in a manner approved by the NJDEP, the need for sediment removal.

7. The piles of zinc, lead and cadmium, or portions thereof, referred to in the Judgment of June 14, 1983 have been removed or stored in a permanent enclosed structure by Madison. The storage of zinc, lead and cadmium at the Madison site shall be done in a manner which prevents zinc, lead and cadmium from entering the waters of the State and further, which prevents zinc, lead and cadmium from being placed in an area where it might flow or drain into said waters.

8. (a) CPS and Madison shall initiate a program acceptable to NJDEP at the start-up of the ground water recovery system to monitor and evaluate the performance of said system. This program shall include the sampling and measurement of water levels in 30 monitoring wells, the sampling of three recovery wells, and the measurement of water levels in eight piezometers. The locations of these wells and piezometers are depicted on Appendix C.

(b) CPS and Madison shall measure water levels from said wells and piezometers according to the following schedule: within 30 days prior to system start-up and 24 hours, 48 hours, 1 week, 2 weeks, 3 weeks, 4 weeks, 8 weeks, 12 weeks, and quarterly after system start-up in conjunction with the sampling frequency set forth in paragraph 8(c) below.

(c) CPS and Madison shall collect samples from the three pumping wells and 20 monitoring wells one month before system start-up, one month after, three months later, and quarterly thereafter. Said samples shall be collected according to NJDEP procedures and analyzed by a New Jersey State certified laboratory approved by NJDEP for zinc, lead, cadmium, copper, and total volatile organic pollutants.

(d) Within six (6) weeks after each sampling event period, CPS and Madison shall submit to NJDEP a report of the sampling results and include a water level contour map for the entire recovery system.

(e) CPS and Madison may propose modifications to this performance monitoring program based on accumulated data for a reasonable period of time before and after system start-up for NJDEP approval. Under no circumstances will CPS or Madison modify and/or terminate the performance monitoring program without prior written authorization from NJDEP.

(f) If after sixty (60) days of start-up, NJDEP concludes that water level and ground water quality data reveal that the ground water recovery system is not controlling and capturing the entire contaminant plume as conceptually predicted in Appendix A, CPS and Madison shall, within thirty (30) days of being advised of this conclusion by NJDEP, propose modifications to the ground water recovery system so as to address NJDEP's concerns. Said modifications may include, but not be limited to, increased pumping, additional pumping wells and/or the extension of the cut-off slurry wall. Upon approval by NJDEP, CPS and Madison shall

implement said modifications forthwith. In the event that the modifications proposed by CPS and Madison are unacceptable to NJDEP, NJDEP shall advise CPS and Madison accordingly. Upon receipt of NJDEP's response, CPS and Madison shall immediately initiate the actions necessary to address NJDEP's concerns. Under no circumstances will a ground water recovery system that does not control and capture the entire contaminant plume be acceptable to NJDEP. It is understood that if the recovery system implemented pursuant to this Order is not, even after modification, controlling and capturing the entire contaminant plume as conceptually predicted in Appendix A, CPS and Madison shall remain liable and responsible for containing and controlling the entire contaminant plume which is the subject matter of this litigation.

(g) The operation of the recovery system will be terminated when four (4) consecutive quarterly samplings, verified by NJDEP, reveal that the ground water quality is equal to or below New Jersey ground water quality standards or background levels, whichever is higher. In reaching a determination as to the achievement of the aforementioned cleanup standards CPS and Madison shall not be responsible for the maximum background levels which are entering onto or influencing the site. The cleanup standards referred to herein are the Safe Drinking Water Act levels for heavy metals (zinc, lead and cadmium) and the guideline of 100 parts per billion (ppb) for total volatile organics. As standards are promulgated for individual and total volatile organics prior to termination as aforesaid, they will become the new performance standards for termination.

(h) CPS or Madison may petition NJDEP at any time for modification and/or termination of the ground water recovery system based upon accumulated data and the demonstration of the absence of public health and environmental consequences and at such time as it can be demonstrated to the satisfaction of NJDEP that further recovery of the ground water will not significantly further improve the ground water quality. However, under no circumstances will CPS or Madison modify and/or terminate the recovery system under this paragraph without prior written authorization from NJDEP.

(i) Upon termination of the ground water recovery system, CPS and Madison shall implement a two (2) year post-recovery monitoring plan approved by NJDEP which will include quarterly sampling from all 33 wells. If at the end of this two year monitoring period all ground water samples remain within the standards referenced in paragraph 8(g), then all monitoring will terminate. If contamination levels rise above the standards referenced in paragraph 8(g) during these two years in any well for two consecutive monitoring sampling events, then CPS and Madison shall reinitiate or appropriately modify the ground water recovery system and reinitiate the performance monitoring program except as provided by paragraph 8(h) above.

9. (a) CPS and Madison shall apply and obtain all required permits including, but not limited to, stream encroachment, NJPDES/SIU, sewer extension and water diversion permits specific to the project prior to the implementation of any aspect of this Order Amending Judgment. CPS and Madison shall file com-

plete permit applications for all permits required to implement their obligations herein within a reasonable time after the execution of this Order Amending Judgment.

(b) The submission of final design, plans, and specifications, for each aspect of this Order shall be in accordance with Appendices D-1 and D-2. Time periods for completion of work herein shall run from date of receipt of effective permits from NJDEP, MCHVA, CETS, and any other agencies from which permits are required.

(c) CPS and Madison shall include the following requirements in the designs of the ground water recovery system:

(1) All recovery wells will be designed and constructed so that they can produce approximately twice the proposed pumpages in Appendix A.

(2) Continuous water level recorders will be installed in four (4) of the piezometers adjacent to the slurry wall and in the three recovery wells or in immediately adjacent piezometers and placed in a locked, secured compartment.

(3) All upgradient monitoring wells and selected down gradient wells will be made tamper proof and include double locks for which NJDEP has the only key to one lock.

(4) All monitoring wells and piezometers (except those described in paragraph (c)(3) above) shall contain locking caps.

(5) An extra 300 gpm well pump will be kept on hand at all times in case of pump failure.

(6) An alarm system will be installed for all recovery pumping wells to alert of pump failure.

(7) NJDEP will have access to the CPS and Madison sites 24 hours a day. During regular working hours, such access shall be upon request without advance notice. During other hours, CPS and/or Madison shall be given reasonable advance notice.

10. (a) CPS and Madison shall provide funds, as described in (b) following, for an NJDEP appointed consultant through payments to be made to an interest bearing escrow account controlled by NJDEP. The appointment of a consultant shall be made by CPS and Madison from five (5) consultants proposed by NJDEP, or as otherwise agreed by CPS, Madison and NJDEP. Said consultant will independently evaluate the performance of the ground water recovery system from start-up and will continue its independent evaluation until NJDEP determines that said consultant's evaluation is no longer necessary.

(b) The amount of funds to be provided by CPS and Madison to NJDEP for such independent consultant shall be strictly limited in accordance with the terms of this paragraph. CPS and Madison shall provide to NJDEP, within ten (10) days of receipt of all permits required for construction of the remedial program referenced herein, \$40,000 for payment by NJDEP to the consultant during the first year following the execution of this Order. On each anniversary of the date of payment of the \$40,000 in the first year, the following sums shall be paid by Madison and CPS at the following times:

- (i) at the 1st anniversary (during 1989) -- \$25,000
- (ii) at the 2nd anniversary (during 1990) -- \$25,000
- (iii) at the 3rd anniversary (during 1991) -- \$10,000
- (iv) at the 4th anniversary (during 1992) -- \$10,000
- (v) at the 5th anniversary (during 1993) -- \$10,000
- (vi) at the 6th anniversary (during 1994) -- \$10,000
- (vii) at the 7th anniversary (during 1995) -- \$10,000
- (viii) at the 8th anniversary (during 1996) -- \$10,000
- (ix) at the 9th anniversary (during 1997) -- \$10,000
- (x) at the 10th anniversary (during 1998) -- \$10,000
- (xi) at the 11th anniversary (during 1999) -- \$10,000
- (xii) at the 12th anniversary (during 2000) -- \$10,000
- (xiii) at the 13th anniversary (during 2001) -- \$10,000

(c) If in any year NJDEP fails to actually expend the annual allotment for that year, it may expend that annual allotment on such consultant in any succeeding year if it is required; however, under no circumstances may NJDEP utilize allotments from future years. Further NJDEP may only draw down such funds as are actually required for the payment of the consultant; these funds may not be used for any other purpose. Any monies remaining in the escrow account at such time as NJDEP determines that the consultant's evaluation is no longer necessary (as described in (a) above) shall be returned to CPS and Madison, in equal shares.

11. (a) Within 120 days of the execution of this Order by the court CPS and Madison shall provide NJDEP with a performance bond in the amount of \$5 million to secure performance of their

obligations under this Order. The performance bond shall be in a form substantially similar to Appendix E. The performance bond shall be for a period of not less than five years. In the event that the hydraulic performance of the recovery system referenced herein is not performing as described in the Wehran Engineering Addendum Number Two, attached as Appendix A, within 90 days prior to the expiration of the aforementioned performance bond, the same shall constitute a material breach of this Order and NJDEP shall have a right to assert a claim against the balance of the performance bond. In addition, in the event of that CPS and Madison fail to perform any of their material obligations under this Order, NJDEP may assert a claim for payment of said performance bond; provided, however, that before a claim can be made, NJDEP shall notify CPS and Madison and the issuing institution in writing of the obligation(s) they have failed to perform, and CPS and Madison shall have a reasonable time, not less than 15 nor more than 20 calendar days, to cure such failure.

(b) It is estimated that the costs associated with the said ground water recovery system are approximately \$2 million. CPS and Madison shall submit a detailed cost estimate for construction of the ground water recovery system within 90 days of the date of this Order. As the various items of work called for in the ground water abatement program are completed and certified to by CPS/Madison's consulting engineers and such certifications are presented to NJDEP the amount of the performance bond shall be reduced to reflect said work completion. The aforesaid certifications shall be submitted in writing to NJDEP detailing what has

been accomplished and requesting NJDEP to set forth any objection it may have in writing within 60 days of receipt of said certifications. If the Department, within the 60-day period, makes no objection in writing, the work which is the subject matter of the certifications shall be deemed to have been completed.

(c) The amount of the performance bond shall not be reduced below \$3 million until such time as it is established to NJDEP's satisfaction that the hydraulic performance of the ground water abatement plan system is performing as described in the Wehran Engineering Addendum Number Two attached as Appendix A.

(d) When the hydraulic performance of the ground water recovery system is performing as described in the Wehran Engineering Addendum Number Two, attached as Appendix A, the bond referenced in paragraphs 11(a), (b) and (c) shall be terminated and in its place a bond in the amount of \$1 million shall be posted to secure operation and maintenance of the ground water recovery system. Said bond shall be in a form substantially similar to Appendix F. Such performance bond shall be for a period of not less than five (5) years. Should CPS and/or Madison and/or NJDEP conclude, by reference to actual and/or anticipated operation and maintenance costs and the projected period of operation of the system, that the \$1 million performance bond referenced herein is either excessive or insufficient, they, or any of them, may apply to the court for an adjustment.

(e) The bond references in this paragraph shall be issued by a company approved in advance by NJDEP.

(f) When the ground water recovery system maloperation and maintenance provisions of paragraph 8(g) or (h), the performance bond referenced herein shall be terminated.

12. CPS and Madison shall each pay to NJDEP, within twenty (20) days following the effective date of this Order, the sum of \$26,620.

13. Arnet Realty Company ("Arnet"), a New Jersey partnership, is the owner of the land on which the Madison operation exists, and is also the owner of the land beyond and to the south of Madison's leased property, on which the stream relocation will take place. Arnet consents to the entry of this Order for the limited purpose of consenting to the undertaking of these remedial measures on its property in consideration of payment to be made by CPS and Madison.

14. This Order Amending Judgment of June 14, 1983 supersedes the Final Order and Judgment of the trial court entered in this matter on October 16, 1981, and the "Final Order and Judgment amended to conform with the decision of the Appellate Division" entered on June 14, 1983 except to the extent that the Appellate Division in its decision of April 21, 1983, and the June 14, 1983 Judgement establish CPS and Madison jointly and severally liable and further, this Order shall not affect in any way the provisions of paragraphs 8 and 9 of the June 14, 1983 Judgment, which paragraphs shall remain in full force and effect and be unaffected by this Order.

15. If any event occurs which purportedly causes or may cause delays in the achievement of any provision of this Order,

CPS/Madison shall notify NJDEP in writing within ten (10) business days of the delay or anticipated delay, as appropriate, describing the anticipated length, precise cause or causes, measures taken or to be taken, and the time required to minimize the delay. CPS/Madison shall adopt all reasonable necessary measures to prevent or minimize delay. Failure by CPS/Madison to comply substantially with the notice requirements of this paragraph shall render this force majeure provision void and of no effect as to the particular incident involved. If the delay or anticipated delay has been or will be caused by fire, flood, riot, strike, or other circumstances alleged to be beyond the control of CPS/Madison, then the time for performance hereunder shall be extended, subject to the approval of NJDEP, no longer than the delay resulting from such circumstances. However, if the events causing such delay are not beyond the control of CPS/Madison, failure to comply with the provisions of this Order shall not be excused as herein provided and shall constitute a breach of the Order's requirements. The burden of proving that any delay is caused by circumstances beyond the control of CPS/Madison, and the length of such delay attributable to those circumstances shall rest with CPS/Madison.

16. All notices, requests, demands and other communications provided for by this Order shall be in writing and shall be deemed to have been given at the time when mailed at any general or branch United States Post Office, enclosed in a registered or certified postpaid envelope and addressed as follows:

To NJDEP

Melinda Dower, Section Chief
Bureau of Case Management
401 East State St.
Trenton, NJ 08625

with a copy to:

Ronald P. Hekach, Deputy Attorney
General
Hughes Justice Complex, CN-112
Trenton, New Jersey 08625

To CFS

Mr. Philip Keisel
CPS Chemical Company, Inc.
P.O. Box 162
Old Water Works Road
Old Bridge, New Jersey 08857

with a copy to:

Theodore A. Schwartz, Esq.
Schwartz, Tobia and Stanziale
22 Crestmont Road
Montclair, New Jersey 07042

To Madison

Mr. Hyman Bzura
Madison Industries, Inc.
P.O. Box 175
Old Water Works Road
Old Bridge, New Jersey 08857

with a copy to

William J. Bigham, Esq.
Sterns, Herbert & Weinroth, P.A.
P.O. Box 1298
186 West State Street
Trenton, New Jersey 08607

To Arnet

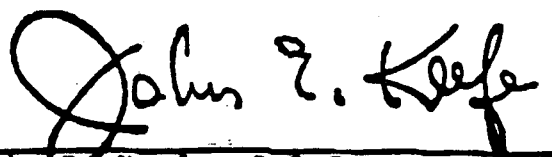
Arnet Realty
c/o Mr. Arnold Asman
111 Great Neck Road
Great Neck, New York 11021

with copies to

Arnet Realty
c/o Mrs. Nettie Bzura
38 Crest Drive
South Orange, New Jersey 07079

Smith, Stratton, Wise,
Heher & Brennan
One Palmer Square
P.O. Box 1154
Princeton, New Jersey 08542

provided, however, that notice of change of address shall be effective only upon receipt.


John E. Keele, J.S.C.

Smith, Stratton, Wise,
Heher & Brennan
Attorneys for Arnet Realty Co.


By: _____

**ADDENDUM NUMBER TWO
TO
RECOMMENDED REMEDIAL PROGRAM FOR ABATEMENT OF
GROUND-WATER CONTAMINATION OF THE OLD BRIDGE SAND AQUIFER
IN THE VICINITY OF CPS AND MADISON INDUSTRIES
OLD BRIDGE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

Prepared for

CPS CHEMICAL COMPANY

**Old Water Works Road
Old Bridge, New Jersey 08857**

Prepared by

WEHRAN ENGINEERING CORPORATION

**666 East Main Street
Middletown, New York 10940**

We Project No. 02362217

March 28, 1984

APPENDIX "A"

PA 40

1.0 INTRODUCTION

In May, 1983 Wehran Engineering submitted its original report entitled "Recommended Remedial Program for Abatement of Ground-Water Contamination of the Old Bridge Sand Aquifer in the Vicinity of CPS and Madison Industries, Old Bridge Township, Middlesex County, New Jersey" to the NJDEP. The recommended remedial plan consisted of a cut-off wall and single recovery well pumping 300 gpm in the vicinity of Pricketts Pond. At the request of the NJDEP, an addendum dated June 21, 1983, was prepared which evaluated the impact of relocating Pricketts Brook and two ground water recovery scenarios. The first scenario (program "A") consisted of the Pricketts Pond well at 300 gpm and existing well T-1 at 150 gpm for a total withdrawal of 450 gpm. Program "B" consisted of program "A" with two additional wells, WCC-6 and M-3 pumping at 125 gpm each for a total withdrawal of 700 gpm.

In accordance with the most recent request of the NJDEP a third ground-water recovery scenario has been evaluated and is presented herein (Addendum Number Two). The plan consists of the Pricketts Pond well pumping 300 gpm and two additional wells, T-1 and T-2, each pumping 50 gpm for a total withdrawal of 400 gpm.

2.0 RESULTS

A ground-water computer simulation was conducted to evaluate the aquifer response to pumping the three recovery wells shown on figure 1. The model type, procedures, grid, boundary conditions, and assumptions used were identical to those used in the original model and will not be repeated herein. It has also been assumed that Pricketts Brook has been relocated to the south such that its influence upon the recovery system is negligible. Computed water table elevations are dependent, in part, upon starting conditions and will vary with natural seasonal fluctuations. Of importance are not absolute elevations but rather relative changes in elevations due to ground water withdrawal.

The computed ground-water elevations (heads) were contoured and superimposed

over the (inferred aerial) extent of the combined zinc and volatile organic pl determined in March, 1982. Computed pumping heads in wells T-1, T-2 and T-3 are 20.87 and 10.98, respectively. The direction of ground-water flow as illustrated by the arrows, indicates full capture of the plume. Individual capture zones for each well are depicted by the dashed lines on figure 1. The maximum "drawback" distance for wells T-1 & T-2 is determined by the location of the stagnation point. Upgradient wells T-1 and T-2 would serve to hasten the recovery of the more highly contaminated portions of the plume while T-3 would capture of all flows paths originating within the plume. In addition, T-3 would provide rapid withdrawal of contaminants originating from unexcavated pond sediments east of the cut-off wall.

The approximate length of time necessary for a particle of water originating within the plume to reach a recovery well can be calculated using the seepage velocity equation ($V_s = Ki/Ne$) and the length of the flow path. Because of the placement of the wells, two calculations were made; one for T-3 and one for T-1 & T-2. If the permeability (K) is assumed to be 1,150 gpd/ft², the effective porosity (Ne) to be 0.40, and the hydraulic gradient (i) to be variable along the flow path, then the maximum travel time to reach T-3 and T-1 & T-2 is 3.0 and 1.5 years, respectively.

These estimates represent one pore volume exchange. However due to retardation of contaminants within the aquifer, actual contaminant travel time may be substantially slower. An evaluation of the retardation factor (original report, section 6.2) indicates that approximately four pore volume exchanges would be necessary to purge the aquifer. Actual expected contaminant travel times, therefore, become 12 and 6 years for wells T-3 and T-1 & T-2, respectively.

The travel time estimates calculated above are based on our present knowledge of the hydrogeology and extent of contamination at the site. As additional data become

Pa 43

available during implementation of the proposed remedial program, these estimates may be refined. The actual duration and capacity of the recovery system will be determined by water quality results generated from the long term monitoring program.

PROJECT SCHEDULE - MONTHLY BASIS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. WASTEWATER TREATMENT GUIDELINES	—															
2. STUDY PHASE	—	—														
3. PILOT PLANT PHASE	—	—	—													
4. ENGINEERS REPORT			—													
5. PRELIM. APPROVAL (NJDEP) *																
6. DETAIL ENGINEERING AND DESIGN				—	—	—	—	—								
7. CONTRACT PLANS, SPECS AND CAPITAL COST ESTIMATE						—	—	—								
8. FINAL REVIEW (NJDEP) *																
9. EQUIPMENT PROCUREMENT							—	—	—	—						
10. CONSTRUCTION								—	—	—	—	—	—	—		
11. START UP														—		

* PROJECT SCHEDULE DOES NOT INCLUDE REVIEW TIME BY NJDEP.

Appendix "D-1a"

JG PROJECT NO. 03-0003-00

JACOBS ENGINEERING GROUP INC.

MADISON INDUSTRIES
OLD BRIDGE, NEW JERSEY

WASTEWATER TREATMENT PLANT
PROJECT SCHEDULE

DATE: 11/11/03
3:30 PM

Pa 17

JACOBS ENGINEERING GROUP INC.

**MADISON INDUSTRIES
SCHEDULE FOR
PILOT PLANT OPERATION AND ENGINEERING & CONSTRUCTION FOR
PLANT WASTE WATER TREATMENT FACILITY**

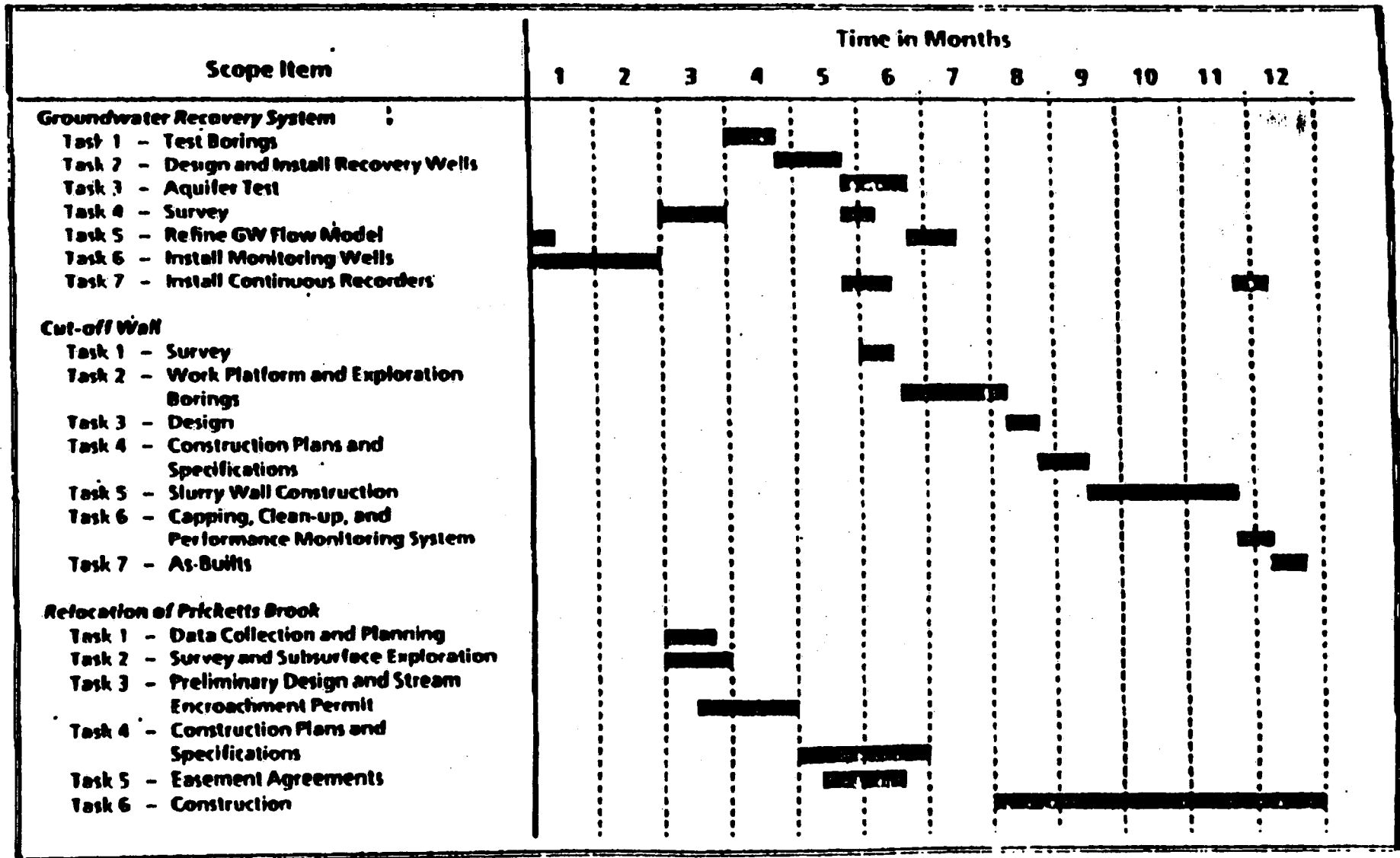
The Schedule is based on the study, pilot plant design and operation, detail engineering, design and construction for a plant waste water treatment facility. The process, to be confirmed by pilot plant work, is based on pre-treatment of waste water by precipitation of solids by neutralization, recovery and recycling of precipitated metals by liquid ion exchange and by post treatment of the treated waste water by precipitation of remaining dissolved metals.

Certain assumptions have been made in developing this schedule that are yet to be confirmed by further study, pilot plant work and by subsequent data collection. The pre-treatment requirements ultimately imposed by the Middlesex County Utilities Authority (MCUA), the Old Bridge Township Sewer Authority (OBISA) and/or the NJDEP may also require changes to the process and consequently the schedule.

The project schedule does not include time to obtain applicable permits, nor does the schedule include review time by NJDEP.

Appendix "D-1b"

RECOMMENDED REVISIONS TO PROJECTED CONSTRUCTION SCHEDULE FOR CPS/MADISON SITE **FEBRUARY 1988**



Note: Certain tasks are presented here as well as in the Design Schedule as they involve field activities which are an integral part of the final system construction.
 Schedule does not include time for regulatory agency review, delays due to weather or subcontractor scheduling.
 Design and construction of pretreatment system is not included.
 Assumes applicable permits have been obtained prior to initiation of work.

Appendix "D-2"

Pa 4/9

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That CPS Chemical Company, Inc. and Madison Industries, Inc., jointly and severally as Principal, hereinafter called Contractor, and [Surety], a corporation organized and existing under the laws of the State of Connecticut, with its principal office in the City of Hartford, Connecticut, as Surety, hereinafter called Surety, are held and firmly bound unto the New Jersey Department of Environmental Protection, as Obligor, in the amount of Five Million and 00/100 Dollars (\$5,000,000), to be reduced to Three Million and 00/100 Dollars (\$3,000,000) as outlined in Section 11(b) of the Consent Order Amending Judgment of June 14, 1983 dated for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successor, and assigns, jointly and severally, firmly by these presents.

Whereas, Contractor has by a certain Consent Order Amending Judgment of June 14, 1983 dated agreed to perform certain obligations in accordance with provisions outlined therein, which Consent Order is by reference made a part hereof, and is hereinafter referred to as the Contract.

Now, Therefore, the condition of the obligation is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect but for a period not to exceed five (5) years from the date of execution.

The Surety hereby waives notice of any alteration or extension of time made by the Obligees.

Whenever Contractor shall be, and declared by Obligees to be in default under the Contract, the Obligees having performed its obligations thereunder, the Surety may promptly remedy the default or shall promptly

(1) Complete the Contract in accordance with its terms and conditions, or

(2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Obligees elects, upon determination by the Obligees and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Obligees, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Any suit under this bond must be instituted before the expiration of five (5) years from the date of this bond.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligees named herein or the heirs, executors, administrators or successors of the Obligees.

Signed, sealed and dated

, 1985.

CONTRACTOR/PRINCIPAL:

SURETY:

-- CPS CHEMICAL COMPANY, INC. --

By: _____

By: _____

MADISON INDUSTRIES, INC.

By: _____

Whereas the New Jersey Department of Environmental Protection, hereinafter called the NJDEP, and CPS Chemical Company, Inc. and Madison Industries, Inc., hereinafter called the Contractor, have entered into a Consent Order Amending Judgment of June 14, 1983, dated for the operation and maintenance specified in Section 11(d) of said Consent Order (herein referred to as "the Contract");

Amount of Bond . . . One Million and no/100 Dollars (\$1,000,000).

Now, THEREFORE, the Contractor, as Principal, and the following named Surety, [Designated Surety] are held and firmly bound to NJDEP as Obligees jointly and severally in the penal sum of this Bond set forth above as Amount of Bond for which payment, well and truly to be made, the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of this obligation is that if the Contractor shall promptly and faithfully perform all the conditions of the Contract in strict conformity with the terms and conditions set forth therein, then this obligation shall be null and void, otherwise it shall remain in full force and effect but for a period not to exceed five (5) years from the date of execution.

Whenever Contractor shall be, and declared by NJDEP to be in default under the Contract, NJDEP having performed

its obligations thereunder, the Surety may promptly remedy the default or shall promptly

(1) Complete the Contract in accordance with its terms and conditions, or

(2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the NJDEP elects, upon determination by the NJDEP and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and NJDEP, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof.

The Surety, for value received, hereby stipulates and agrees that no change, alteration or addition or extension of time in the terms of the Contract or in the goods, supplies or service to be furnished thereunder shall in any wise affect its obligations on this bond; and it does hereby waive notice of any such change.

FREDERICK A. DEVESA
Acting Attorney General of New Jersey
Attorney for Plaintiff
State of New Jersey, Department of Environmental
Protection and Energy
R.J. Hughes Justice Complex
25 Market Street
CN 118
Trenton, New Jersey 08625
Through: **Steven J. Madonna**
State Environmental Prosecutor
By: **Charles A. Licata**
First Assistant State Environmental Prosecutor
(609) 292-3924

**CITY OF PERTE AMBOY,
A Municipal Corporation of
the State of New Jersey**

Plaintiff,

v.

**MADISON INDUSTRIES, INC.,
et al.,**

Defendants.

**STATE OF NEW JERSEY,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION & ENERGY**

Plaintiff,

v.

**CHEMICAL & POLLUTION
SCIENCES, INC., et al.**

Defendants.

**SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MIDDLESEX COUNTY
DOCKET NOS. C-4474-76 and
L-28115-76
(consolidated)**

SPECIAL ENVIRONMENTAL CASE

Civil Action

**ORDER MODIFYING
APRIL 27, 1988 ORDER
AMENDING JUDGMENT OF
JUNE 14, 1983 CONSENTED
TO BY ARNET REALTY**

This matter, having been opened to the Court by the City of Perth Amboy, Joseph J. Marasiti, Jr., Esquire appearing, and the State of New Jersey, Department of Environmental Protection and Energy ("NJDEP"), by Frederick A. DeVesa, Acting Attorney General of the State of New Jersey, Charles A. Licata, First Assistant State Environmental Prosecutor appearing, and on motions in Aid of Litigant's Rights for Defendants' failure to comply with the Order of this Court dated April 27, 1988, Amending Judgment of June 14, 1983, Consented to by Arnet Realty ("1988 Order") pursuant to R. 1:10-5, and by Madison Industries, Inc., by its counsel William J. Bigham, Esquire, appearing on a Motion in Aid of Litigant's Rights pursuant to R. 1:10-5, and Steven Singer, Esquire, appearing on behalf of Chemical & Pollution Sciences, Inc. ("CPS"), on short notice given the emergent nature of the issues raised, and the Court having held hearings and taken testimony on May 26, 27, 28, June 1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 16 and 17, 1992, and the Court having heard and considered the arguments of counsel, and the evidence introduced during the course of said hearings, and the Court having made findings and rendered an oral decision from the bench on June 30, 1992, and for the reasons set forth in said decision;

IT IS this 2nd day of July, 1992, ORDERED that:

1. The Court has determined that under the 1988 Order the cleanup standards in this case are Maximum Contaminant Levels under the Safe Drinking Water Act. These include, but are not limited to, benzene, 1 ppb; chlorobenzene, 4 ppb; zinc, 5ppm;

cadmium, 10 ppb; and lead, 50 ppb. As standards under the Safe Drinking Water Act or other relevant cleanup standards are subsequently adopted by NJDEPE they will become the new performance standard under this Order.

2. Management and control of the remediation of the contamination caused by Defendants within the Runyon Watershed and the source of the contamination shall be vested in the NJDEPE. Defendants shall no longer have a direct or discretionary role in the remediation at this site. Until otherwise directed by NJDEPE the Defendants shall, at their expense, continue to operate and maintain the existing ground water recovery system. The City of Perth Amboy's application for direction and control of the remediation of contamination is denied.

3. NJDEPE shall, at Defendants' expense, take whatever action is necessary to capture and control the entire contaminant plume and remediate the contamination caused by the Defendants, including, but not limited to:

a) Providing well head treatment to remove Volatile Organic Compounds from the water pumped at Perth Amboy Supply Well #6. A plan for such treatment shall be provided to the Court for its approval, by NJDEPE, within thirty (30) days of the date of this Order. Said proposal shall provide for construction to be completed within nine (9) months of the approval of the system by the Court; and

b) Evaluating the effects of revising pumping rates

of the existing ground water recovery system. A report containing this evaluation and any recommendations that result shall be provided to the Court within thirty (30) days of the date of this Order; and

c) Conducting a study to evaluate the advisability and feasibility of reactivating and treating, as necessary, Perth Amboy Supply Well #5, within ninety (90) days of the date of this Order; and

d) Providing monthly reports to the Court, beginning August 1, 1992, detailing progress made in implementing the provisions of this Order, meetings held, and any outstanding issues. Said reports shall be provided for a period of nine (9) months absent further Order of this Court; and

e) Continuing negotiations with the Middlesex County Utilities Authority to extend the deadline for the discharge of recovered ground water to the sewer system. Absent agreement as to any such needed extension, NJDEP shall move, on short notice, before this Court for appropriate relief; and

f) Taking any action and performing any needed work under this Order, contracting with any appropriate entity to do same or requiring defendants to perform any needed work. The Court specifically finds for the purpose of public contracting law, that work performed pursuant to this Order is of an emergent nature.

4. CPB shall install an additional recovery well as soon

as possible, subject to the NJDEPE's approval. Credit shall be provided on a dollar-for-dollar basis for any reasonable expenditures incurred by CPS and approved by NJDEPE in installing this well against the Defendants' financial obligations set forth in paragraph 8 below. The City of Perth Amboy shall allow CPS access to the City's property for the purpose of implementing the terms and conditions of this Order.

5. The parties shall continue to meet and discuss appropriate alternative plans for the recharge of the recovered and treated ground water including, but not limited to, discharge to ground water, discharge to surface water and spray irrigation. Absent agreement as to a recharge plan within forty-five (45) days of the date of this Order, the NJDEPE shall so advise this Court. Thereafter, the Court shall set the matter down for a hearing to decide the issue.

6. Defendants and NJDEPE shall continue to negotiate regarding the implementation of a Remedial Investigation/Feasibility Study for contamination at the Runyon Watershed.

7. Defendants are jointly and severally liable to pay NJDEPE for all costs, including its oversight and administrative expenses, incurred by NJDEPE to capture and control the entire contaminant plume, remediate the pollution caused by the Defendants and implement the terms and conditions of this Order.

8. Defendants are jointly and severally liable to provide \$2 million dollars to be deposited in an interest bearing escrow account which the NJDEPE may draw upon for any costs incurred in

implementing this Order. Within forty-five (45) days of the date of this Order, each Defendant shall provide \$250,000 for deposit into said account. An additional \$750,000 shall be provided by each Defendant no later than ninety (90) days thereafter. The account shall be replenished, within thirty (30) days of the balance reaching \$200,000 and NJDEPE submitting the cost estimate for the remainder of the work to the Court, to the amount of the cost estimate or \$2 million dollars, whichever is less. NJDEPE shall submit invoices to Defendants for any work done pursuant to this Order, along with a certification that the work has been satisfactorily completed. Twenty (20) days after said notice NJDEPE may withdraw funds from the escrow account to pay the invoices in question.

9. Defendants remain jointly and severally liable for the pollution within the Runyon Watershed and the NJDEPE shall not incur any liability nor shall it be considered an owner or operator of the site as a result of the Department's good faith efforts in implementing this Order.

10. Nothing in this Order shall prevent the NJDEPE, the United States Environmental Protection Agency or the City of Perth Amboy from taking any and all enforcement or other actions against the Defendants as may be available pursuant to law. Nor shall this Order act in any way to prevent the City of Perth Amboy from seeking monetary damages or other relief from the Defendants pursuant to Paragraphs of 8 and 9 of the June 14, 1983 Judgment or other applicable law.

11. The Court finds by the preponderance of the evidence that Madison Industries, Inc., substantially contributed to the plume of metals contamination in and about PA 3. The Court makes no affirmative findings at this time with regard to the degree of contribution by the City of Perth Amboy to said plume.

12. Plaintiffs' and Madison Industries' applications for contempt, and their requests for fees and expenses, were not addressed given the emergent nature of these proceedings. At any parties request, the Court shall set the matter down for discovery and, if necessary, a plenary hearing. The Court will reserve to a subsequent proceeding all applications regarding relative culpability as it relates to contempt, fees and expenses.

13. Except as superseded by this Order all provisions of the April 27, 1988 Order Amending Judgment of June 1983, Consented to by Arnet Realty, shall remain in full force and effect.

14. This Court retains jurisdiction over this matter.

15. All testimony and other evidence introduced as part of this emergent proceeding shall be part of the record in any future plenary hearing in this case.

16. Applications for stays are denied sua sponte.

17. For the purpose of appeal, this is a final Order *As to the DECISIONS AND DIRECTION OF THIS ORDER*


C. Judson Hamlin, J.S.C.

----- X
CITY PERTH AMBOY, :
A Municipal Corporation :
of the State of New Jersey, :
Plaintiff, :
:

vs. :

MADISON INDUSTRIES, INC., :
et al. :
Defendants. :
:

----- X
STATE OF NEW JERSEY, DEPART- :
MENT OF ENVIRONMENTAL PRO- :
TECTION. :
Plaintiff, :
:

vs. :

CHEMICAL & POLLUTION SCIENCES :
INC., et al. :
Defendants. :
:

----- X

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY

DOCKET Nos. C-4474-76 and
L-281115-76 (consolidated)

SPECIAL ENVIRONMENTAL CASE

CIVIL ACTION

AFFIDAVIT OF
FLETCHER N. PLATT, JR., P.E.

McMANIMON & SCOTLAND
One Gateway Center, Suite 1800
Newark, New Jersey 07102
(201) 622-1800
Attorney for Appellant,
The City of Perth Amboy

STATE OF NEW JERSEY)
 : SS:
COUNTY OF MORRIS)

: SS:

COUNTY OF MORRIS)

I, Fletcher N. Platt, Jr., of full age, being duly sworn according to law, upon my oath depose
and say:

- 1.) I am a licensed Professional Engineer in New Jersey and an Executive Vice President with Killam Associates, Consulting Engineers. I have been retained by the City of Perth Amboy ("City") to serve as Special Environmental Engineer in matters pertaining to the contamination of the Runyon Watershed.
- 2.) Since July 1991, I have represented the City and have become thoroughly familiar with the site contamination, site investigations and remedial investigations.
- 3.) I have been requested by the City of Perth Amboy to review the potential impacts that the improper storage of waste materials on the Madison site has or may have on the City's Runyon Watershed.
- 4.) I have observed that large waste piles have been stored on the Madison site since July 1991. The attached photographs taken in June 1993 illustrate the magnitude of the waste piles which continue to exist to this day. Based upon the information and knowledge that I have about this matter, it is my opinion that the open storage of waste materials on the Madison site continues to release contaminants, including hazardous substances, into the water supply source of the City of Perth Amboy.

- 2.) Since July 1991, I have represented the City and have become thoroughly familiar with the site contamination, site investigations and remedial investigations.

- 3.) I have been requested by the City of Perth Amboy to review the potential impacts that the improper storage of waste materials on the Madison site has or may have on the City's Runyon Watershed.

- 4.) I have observed that large waste piles have been stored on the Madison site since July 1991. The attached photographs taken in June 1993 illustrate the magnitude of the waste piles which continue to exist to this day. Based upon the information and knowledge that I have about this matter, it is my opinion that the open storage of waste materials on the Madison site continues to release contaminants, including hazardous substances, into the water supply source of the City of Perth Amboy.

Madison's Waste Piles Are Hazardous Wastes

5.) The NJDEPE has determined that the waste piles contain materials generated in part by Madison Industries. A NJDEPE letter to Hyman Bzura, dated August 10, 1989, provides the following:

"5. The waste pile on Old Bridge property which is sold as a product is a mixture of various materials from all three companies that are no longer usable by those companies; Old Bridge, Madison Industries and Madison chemicals..."

6.) The Order to Show Cause filed by NJDEPE against Old Bridge Chemicals, Inc., Madison Industries Inc., Arnet Realty, A Partnership, Hyman Bzura, Nettie Bzura and Arnold Asman in March 1993 also states that the exposed waste piles are composed of wastes generated by Madison Industries and related companies.

7.) The NJDEPE sampled the waste piles on two (2) occasions: December 1989 and October 1992. The Extraction Procedure (EP) Toxicity Characteristic indicates the tendency of toxic substances to leach out of the waste. Lead and cadmium are among the forty substances exhibiting the toxicity characteristic. Thirteen (13) samples were collected in 1989 and analyzed using the EP Toxicity Test. Every sample exceeded the limits for either lead or cadmium which defines this waste as hazardous. In 1992, the NJDEPE collected five (5) samples and analyzed these with both the EP Toxicity Test and the more recent Toxic Characteristic Leaching

Procedure (TCLP). Once again, every sample analyzed exceeded the hazardous limits for either lead or cadmium under both procedures. An NJDEPE memorandum discussing this analysis is provided as Exhibit 1.

Madison's Piles Contain Large Amounts of Zinc and Copper

8.) The NJDEPE analysis determined that these piles exhibited characteristics of hazardous waste based upon toxic levels of lead and cadmium. Although no analytical reports on the actual composition of the piles were available to the City, it is fully documented that the piles contain not only lead and cadmium, but at least 20% zinc and 20% copper by weight. I believe that these piles are contributing to the groundwater and surface water contamination, which is impacting the City's water supply and Runyon Watershed.

9.) A NJDEPE Hazardous Waste Management Facility Inspection Report, dated April 3, 1991, indicates that the waste piles contain a minimum of 20% zinc and 20% copper by weight. Page 11 of the April 3, 1991 report provides the following description of these piles:

"4. Finally it should be noted that Old Bridge Chemicals and Madison Industries intentionally under-react their zinc solutions so that 20% of the zinc remains in solution along with any other materials (contaminants). The main reason for maintaining 20% zinc in solution is so that when a product is removed the waste will contain 20% zinc and be considered a "fertilizer product". (A second reason is to consume all sulfuric acid during processing.)

According to Hyman Bzura, the 1,300 cubic yards "20/20 Copper/Zinc Compound Micronutrient Fertilizer" present on-site has been accumulating since March 1989. The material has been produced since 1973."

Size of Piles is Increasing

10.) The Order to Show Cause filed by NJDEPE in March 1993, states that the waste pile at the Madison site is approximately 1,500 cubic yards, an increase over the 1,300 cubic yard estimate in 1991. The NJDEPE believes this is comparable to the size of an average ranch house.

11.) The NJDEPE indicates that the size of the piles has remained fairly constant despite the off-site removal of 13,380,000 pounds from the pile between May 1990 and October 1992. To keep the piles a constant size while removing this amount for off-site sale, it is estimated that Madison would have to add an equivalent of approximately 7.5 tons of new waste per day.

12.) At 1,500 cubic yards, the weight of the piles is estimated to be approximately 4.7 million pounds. If the composition of the piles is a minimum 20% zinc and 20% copper as indicated by Madison, approximately one million pounds of both zinc and copper are contained in these piles.

Madison's Piles Are Impacting the Runyon Watershed

13.) The open storage of these waste piles at Madison is contaminating the area's groundwater and surface water. The waste piles at Madison are uncovered and kept on bituminous pavement. The tendency of the piles to leach toxic levels of both cadmium and lead was demonstrated by NJDEPE's analytical testing (Exhibit 1). The waste piles pose a threefold hazard to the Runyon Watershed: (A) the contaminants can migrate by surface runoff to Pricketts Brook, which would convey these contaminants onto the Runyon Watershed; (B) the contaminants in the piles can leach through the bituminous pavement into the aquifer and migrate downgradient towards Perth Amboy's wells; and (C) the contaminants can be scattered and dispersed by wind where there are no barriers to its entry into surface waters and groundwater.

(A) Pricketts Brook Continues to Convey Heavy Metals onto the Runyon Watershed

14.) The 1981, 1983 and 1988 Court Orders included provisions that required CPS Chemical and Madison Industries to jointly relocate Pricketts Brook around the perimeter of their properties. The stream currently flows through the center of Madison's property and adjacent to the uncovered waste piles. The purpose of relocating Pricketts Brook was to minimize the conveyance of contaminated surface or groundwater from Madison to the Runyon Watershed.

15.) The Class II-A groundwater standards are identical to the New Jersey Safe Drinking Water Act Maximum Contaminant Limits and are provided below.

Class II-A Groundwater Standards

Zinc	5,000 ppb
Lead	50 ppb
Cadmium	10 ppb
Copper	1,300 ppb

The NJDEPE Surface Water Standards for lead and cadmium are the same as for groundwater. The zinc and copper standards vary depending upon the water hardness and are indicated below. To determine if the surface water exceeds the standards, the sample must be analyzed for hardness. This value is entered into the NJDEPE formulas for the zinc and copper standards. The standards are variable. Therefore, if the metal exceeds the resulting standard value, it violates the surface water standards.

FW-2 Surface Water Standards

Zinc	$e (0.8473 (\text{natural log } H) + 0.8604) \text{ ppb}$
Lead	50 ppb
Cadmium	10 ppb
Copper	$e (0.9422 (\text{natural log } H) - 1.464) \text{ ppb}$
H = Hardness (ppm)	

Pricketts Brook Location	Surface Water Standards Corresponding		
	Measured Hardness (ppm)	Zinc (ppb)	Copper (ppb)
Entering Madison	26	37	5
Exiting Madison	250	254	42
Runyon - Midway between Madison and Pricketts	100	117	18
Runyon-Pricketts Pond	10	17	2
Source of Hardness Values - Madison PMPR May 31, 1994			

16.) In June 1992, employees of the City of Perth Amboy Water Department noticed that stormwater runoff from Madison Industries had a green tint and white foam. Several surface water sampling events were conducted following significant storms in June 1992. The water in Pricketts Brook was comprised primarily of surface runoff and had high levels of metals. Samples were collected at three (3) locations along Pricketts Brook: 1) the fenceline between Madison Industries and the City's Runyon Watershed; 2) Pricketts Pond Inlet; and 3) Pricketts Pond Outlet. The zinc results are provided below.

Zinc in Pricketts Brook and Pond (ppb)				
<u>Location</u>	<u>6/1/92</u>	<u>6/10/92</u>	<u>6/15/92</u>	<u>6/22/92</u>
Fence Line	1,300	2,650	6,300	5,800
Pond Inlet	1,500	4,750	6,900	5,200
Pond Outlet	3,720	2,850	3,900	7,100

A letter from Fletcher Platt to NJDEPE, dated July 27, 1992, provides a more detailed description of this investigation and is included as Exhibit 2. These levels of zinc in Pricketts Brook consistently exceed the surface water quality standards.

17.) Metal concentrations in Pricketts Brook have been increasing since the end of 1993. Madison Industries has issued its twelfth and thirteenth Quarterly Performance Monitoring Program Reports, dated February 28, 1994 and May 31, 1994, respectively. Madison collected samples from Pricketts Brook on its property and the City's Runyon Watershed. The results are as follows.

Location	December 1993 (ppb)			
	Zinc	Lead	Cadmium	Copper
Entering Madison	250.0	13.8	ND	69.0
Exiting Madison	400.0	7.3	ND	44.0
Runyon-Pricketts Pond	9,600.0	18.5	14.5	154.0

Location	March 1994 (ppb)			
	Zinc	Lead	Cadmium	Copper
Entering Madison	2,500	95.9	5.8	2,070.0
Exiting Madison	62,000	129.7	207.0	1,880.0
Runyon - Midway between Madison and Pricketts Pond	47,000	71.8	56.0	1,260.0
Runyon-Pricketts Pond	790	20.2	ND	60.0

18.) The City has conducted surface water samples at three points along Pricketts Brook within the Runyon Watershed on April 15, 1994. All samples contained high levels of zinc which exceed surface and groundwater quality standards and the data is provided as follows:

Location	Zinc (ppb)
Outlet of Pricketts Pond	20,900
Pricketts Brook at Service Road	23,600
Pricketts Brook near Tennent Pond	22,400

19.) These metal concentrations in Pricketts Brook are of serious concern. I strongly believe that the waste piles at Madison are contributing to the contamination of Pricketts Brook. Once these metals enter Pricketts Brook, they completely bypass the existing system of recovery wells. There is no control mechanism in place to prevent these contaminants from flowing downstream into the Runyon Watershed and recharging the aquifer, further contaminating the City's drinking water supply source.

(B) Groundwater Contamination at Madison Threatens the Runyon Watershed

20.) The groundwater at Madison remains heavily contaminated, despite over three years of remedial pumping of the aquifer. I am certain that the waste piles are leaching and acting as a continuing source of contamination of heavy metals into the underlying aquifer. It is my opinion that contaminated groundwater at Madison is entering Pricketts Brook and being conveyed onto the City's property.

21.) In response to the concern for contaminated groundwater recharging the brook, Madison installed a new recovery well to help lower the water table in the vicinity of Pricketts Brook. RW-6 was installed on the north side of Pricketts Brook between the exposed waste piles and the stream. The contaminants detected in RW-6 are among the highest detected at Madison. The latest two (2) quarterly sampling results are provided below:

	December 1993 (ppb)	March 1994 (ppb)
Zinc	730,000.0	370,000.0
Lead	159.0	156.2
Cadmium	505.0	604.0
Copper	5,470.9	12,600.0

22.) It is my opinion that this heavily contaminated groundwater continues to recharge Pricketts Brook. Zinc levels in Pricketts Brook increase twenty-five fold between its entrance and exit from the Madison site.

23.) The exposed waste piles are certainly contributing to the severe groundwater pollution at the Madison site and the Runyon Watershed. There are three (3) monitoring or recovery wells directly between the exposed waste piles and Pricketts Brook. These wells are RW-6, MI-02 and RW-3. These three wells have the highest concentrations of heavy metals detected at the entire Madison site. The December 1993 and March 1994 data for MI-02 and RW-3 demonstrate a substantial increase in zinc contamination and are provided below:

	MI-02 (ppb)		RW-3 (ppb)	
	December 1993	March 1994	December 1993	March 1994
Zinc	8,800.0	90,000.0	29,500.0	107,000.0
Lead	169.0	118.6	15.6	36.4
Cadmium	152.0	92.0	101.0	156.0
Copper	8090.0	7,200.0	2,120.0	1,790.0

24.) It is my opinion that the heavily contaminated groundwater beneath the waste piles at Madison contributes to the contamination at Pricketts Brook during periods of high groundwater. Furthermore, the available data points to these large exposed piles as a source of the groundwater contamination. Therefore, the waste piles are a continuing threat to the City's water supply and the Runyon Watershed.

(C) Exposed Piles are Subject to Windborne Dispersion

25.) The piles at Madison are stored on bituminous pavement and are not covered. Without such protective covering, there is nothing to prevent this contaminated material from scattering. As the dust or other particles escape the pile, they may land on unpaved surfaces or directly in

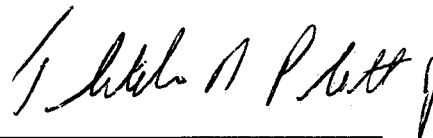
Pricketts Brook, adding to the heavy metal contamination.

This concern has been previously raised in the aforementioned NJDEPE Facility Inspection Report, dated April 3, 1991, Page 11 Item 2 states in part the following:

"Specifically, the material is stored as a pile which allows for dispersion by wind and precipitation."

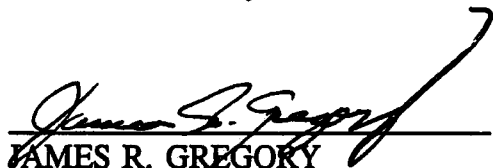
Conclusions and Recommendations

26.) For the above stated reasons, it is my opinion that the exposed open air storage of the waste piles at Madison continue to release contaminants, including hazardous substances, into the water supply source of the City of Perth Amboy and that the piles should be removed from the site as previously ordered by the Superior Court of New Jersey.



Fletcher N. Platt, Jr.; P.E.

Sworn and subscribed to before
me this 16 day of June, 1994.



JAMES R. GREGORY
ATTORNEY-AT-LAW OF NEW JERSEY

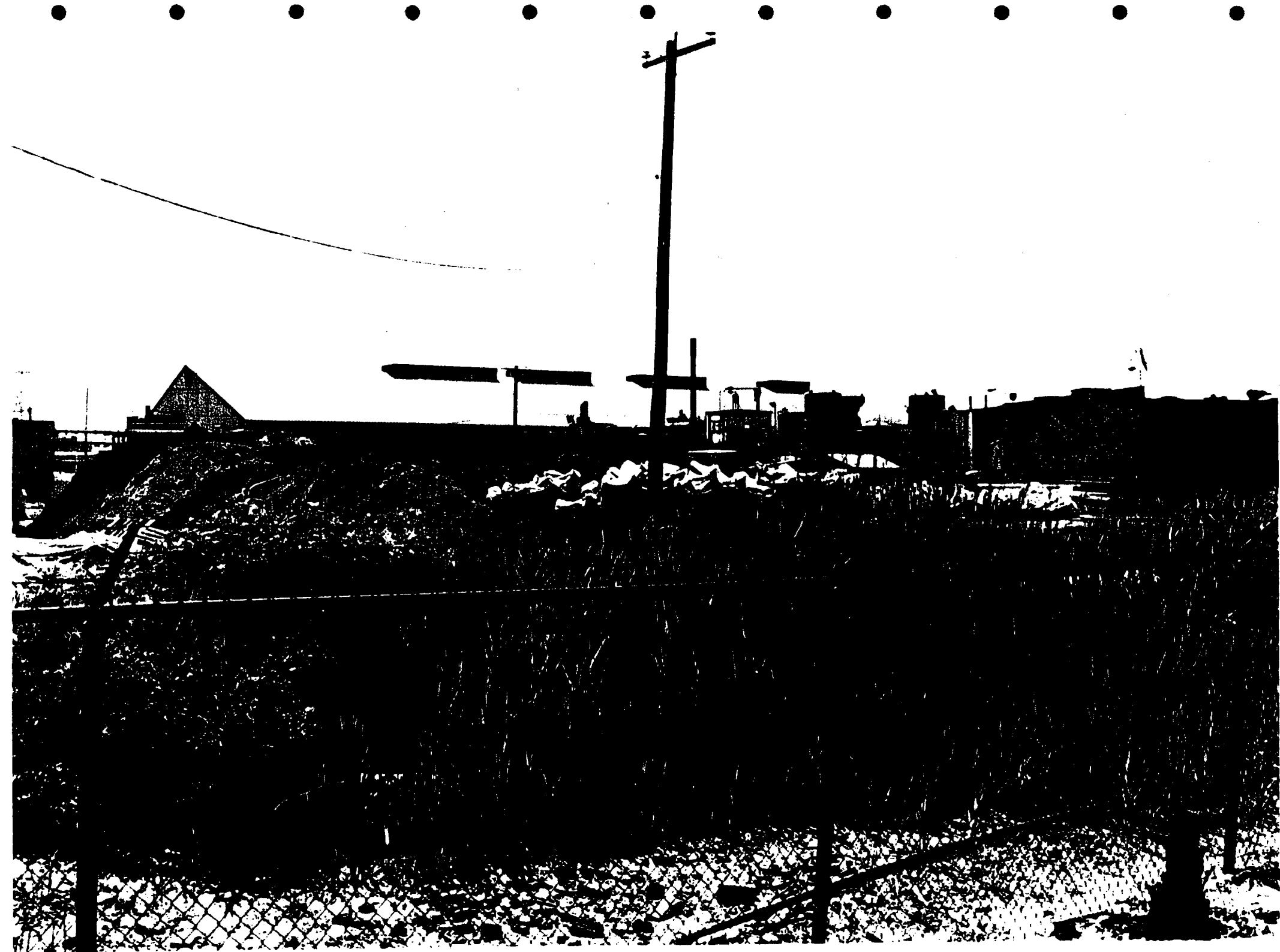




EXHIBIT 1

New Jersey Department of Environmental Protection & Energy
Division of Facility Wide Enforcement
Central Bureau of Water & Hazardous Waste Enforcement

MEMORANDUM

TO: Scott Dubin
FROM: Dale Adkisson
SUBJECT: Old Bridge Chemical Waste Pile Analytical Data
RE: TCLP & E.P. Toxicity
DATE: February 10, 1993

The following analytical data is a summary of the TCLP toxicity results obtained from samples collected from the hazardous waste pile ("micronutrient fertilizer" pile) @ Old Bridge Chemical by NJDEPE on 10/21/92.

Sample ID #	TCLP LEAD ppm units MCL = 5.0	TCLP CADMIUM ppm units MCL = 1.0
MWH-133	27	14
MWH-134	44	15
MWH-135	22	4.8
MWH-136	27	3.9
MWH-137	4.1	2.1

Additionally, NJDEPE had these same samples also analyzed for the E.P. Toxicity characteristic. The results obtained are as follows:

SAMPLE ID #	E.P. TOXICITY LEAD (ppm) MCL = 5.0	E.P. TOXICITY CADMIUM (ppm) MCL = 1.0
MWH-133	48	13
MWH-134 ---	36	26
MWH-135	4.3	4.8
MWH-136	20	6.6
MWH-137	17	3.3

NJDEPE also sampled the waste pile on 12/4/89 and collected 13 samples from the waste pile and analyzed them for E.P. Toxicity. All samples results for cadmium exceeded the MCL (1.0 ppm) and all but 1 exceeded the MCL for lead (5.0 ppm). See sample results below.

USEPA replaced the E.P. Toxicity procedure with the TCLP (Toxic Characteristic Leaching Procedure) as the regulatory method to determine if a solid waste exhibits the toxicity hazardous waste RCRA characteristic. This became effective on 3/29/90. However, the Federal USEPA still utilizes the E.P. Toxicity methodology to determine if a RCRA hazardous waste meets Federal Land Disposal Restriction (LDR) requirements. As Old Bridge Chemical / Madison Industries waste piled material ("micronutrient fertilizer") is ultimately applied to the land, the Federal LDR requirements are relevant to this case. As such, the NJDEPE had the waste samples collected on 10/21/92 also analyzed for E.P. Toxicity in addition to the TCLP in order to verify non-compliance with Federal RCRA LDR regulations.

12/4/89 E.P. Toxicity sampling results:

SAMPLE ID	E.P. TOXICITY LEAD (ppm units) MCL = 5.0	E.P. TOXICITY CADMIUM (ppm units) MCL = 1.0
DMA-020	300	40
DMA-021	84	13
DMA-022	15	7.8
DMA-023	110	14
DMA-024	69	24
DMA-025	63	3.9
DMA-026	32	3.7
DMA-027	91	11
DMA-028	25	5.1
DMA-029	88	4.8
DMA-030	4	5.8
DMA-031	12	13
DMA-032	80	15

EXHIBIT 2



Associates ■ Consulting Engineers

6 Emery Avenue
Randolph, NJ 07869-1362
Telephone: 201-328-6611
Fax: 201-328-6935

July 27, 1992

Fletcher N. Platt, Jr., P.E.
Executive Vice President

Mr. Paul Harvey, Case Manager
New Jersey Department of Environmental Protection
Hazardous Waste Management
401 East St., 5th Floor, West Wing
CN 028
Trenton, New Jersey 08625-0028

RE: 206001 - City of Perth Amboy
CPS/Madison

Dear Mr. Harvey:

We wish to bring to your attention the results of recently performed surface water quality sampling of Pricketts Brook within the Runyon Watershed. During and immediately after recent storm flow events, samples were taken to determine if continued contamination of the City of Perth Amboy's property was occurring via Pricketts Brook. The sampling was conducted on behalf of the City of Perth Amboy by both Killam Associates and J.R. Henderson Laboratories.

On Monday, June 1, 1992, Killam Associates sampled surface water and sediments at three (3) locations of Pricketts Brook. These locations are as follows:

1. Fence at Madison Industries/Perth Amboy property line.
2. Pricketts Pond East (influent of pond).
3. Pricketts Pond West (effluent of Pond).

This sampling was performed immediately following a storm flow event. Additional samples (water only) were taken at these three locations by J.R. Henderson Laboratories on June 10, 15 and 22, which also were during or immediately after storm flow events.

Review of the laboratory results provides evidence of continued heavy metal contamination of Pricketts Brook by Madison Industries. The laboratory reports are enclosed herewith for your review, and the results are summarized below:

PRICKETTS BROOK AND POND SAMPLING
Concentration, mg/l

	<u>Location</u>	<u>6/1/92</u>	<u>6/10/92</u>	<u>6/15/92</u>	<u>6/22/92</u>
Zinc	Fence Line	1.3	2.65	6.3	5.8
	Pond Inlet	1.5	4.75	6.9	5.2
	Pond Outlet	3.72	2.85	3.9	7.1

	<u>Location</u>	<u>6/1/92</u>	<u>6/10/92</u>	<u>6/15/92</u>	<u>6/22/92</u>
Lead	Fence Line	0.138	0.2	0.036	<0.005
	Pond Inlet	0.01	<0.005	0.015	0.007
	Pond Outlet	0.01	<0.005	0.011	0.012
Cadmium	Fence Line	<0.01	<0.02	<0.002	<0.002
	Pond Inlet	<0.01	<0.02	<0.002	0.05
	Pond Outlet	0.02	<0.02	<0.002	0.02

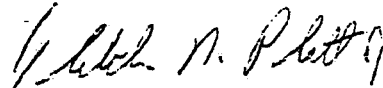
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These water quality analysis indicate a continuing discharge of the heavy metal contaminants in violation of Judge Hamlin's Order to control and contain the contaminant plume. In addition, the current Surface Water Quality Criteria for FW2 Waters (N.J.A.C. 7:9-4.14(c)) establish maximum cadmium and lead concentrations at 0.01 mg/l and 0.05 mg/l, respectively. The surface water criteria for zinc has not yet been established. The proposed NJDEPE standards for these metals will reportedly be based upon USEPA Acute and Chronic Aquatic (Life) Protection Criteria or developed Human Health Criteria. The USEPA has developed its aquatic criteria (304A) for zinc in surface water based on the measured hardness of the water in question. Based upon that criteria, the surface water standard for zinc could be set at a standard below 500 ppb, or 0.5 mg/l. This is one tenth of the Safe Drinking Water Act MCL.

These results clearly indicate that the surface water quality in Pricketts Brook does not meet either existing or proposed surface water quality standards. Based upon the information provided by this sampling, we suggest that the ongoing evaluation of the Runyon Watershed, including the Remedial Investigation/Feasibility Study (RI/FS), must address this continuing source of contamination. Should you have any questions or comments, please do not hesitate to contact this office.

Very truly yours,

KILLAM ASSOCIATES



Fletcher N. Platt, Jr., P.E.

FNP:ab

cc: Mayor Joseph Vas
Dennis Gonzalez
Martin Langenohl
Joseph Maraziti, Jr., Esq.
Charles Licata
John Preczewski
Lance Miller
John Osolin
Brian Ellwood
Steven Singer
William Bigham
Steven Goldberg

----- X
CITY PERTH AMBOY, :
A Municipal Corporation :
of the State of New Jersey, :

Plaintiff, :

vs. :

MADISON INDUSTRIES, INC., :
et al. :

Defendants. :

----- X
STATE OF NEW JERSEY, DEPART- :
MENT OF ENVIRONMENTAL PRO- :
TECTION. :

Plaintiff, :

vs. :

CHEMICAL & POLLUTION SCIENCES :
INC., et al. :

Defendants. :

----- X

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY

DOCKET Nos. C-4474-76 and
L-281115-76 (consolidated)

SPECIAL ENVIRONMENTAL CASE

CIVIL ACTION

ORDER

McMANIMON & SCOTLAND
One Gateway Center, Suite 1800
Newark, New Jersey 07102
(201) 622-1800
Attorney for Appellant,
The City of Perth Amboy

THIS MATTER, HAVING BEEN OPENED TO THE COURT, on application of the Plaintiff, CITY OF PERTH AMBOY, by McManimon & Scotland (Joseph J. Maraziti, Jr., Esq., appearing) on Order to Show Cause to Enforce Litigant's Rights as set forth in the Order of this Court dated April 27, 1988, affirmed by Order dated July 2, 1992, on notice to all parties; and opposition having been submitted by Hannotch Weisman (William Bigham, Esq., appearing); the Court having considered all papers submitted on behalf of the respective parties, both in support of and in opposition to Plaintiff's application; and the Court having heard and considered the arguments of counsel; and the Court having found that this is a priority matter that deals with the public health and welfare and involves a threat to the water supply and health of the residents of the City of Perth Amboy; and further good cause having been shown:

IT IS on this day of June, 1994.

ORDERED:

1. Within 20 days of the date of this Order, Defendant Madison shall remove any and all piles of hazardous materials or, in the alternative, store such material in a manner protective of the waters of the State, the water supply of the City of Perth Amboy and the environment.

2. Defendant Madison shall pay to the Plaintiff, City of Perth Amboy, all reasonable and necessary counsel fees, expert fees and costs incurred by the City in connection with this action.

3. This Order shall not, in any way, prevent any action on behalf of any federal, state, or local governmental body in connection with the protection of the water supply of the City of Perth Amboy. Nor shall this Order act in any way to prevent the City from seeking monetary damages or other relief from the Defendant Madison pursuant to Paragraph 10 of the 1992 Order or other applicable law.

IT IS FURTHER ORDERED that a copy of this Order shall be served on all parties appearing herein within five (5) days of the date hereof.

C. JUDSON HAMLIN, J.S.C.